

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**WORKPLACE VIOLENCE AGAINST EMERGENCY
DEPARTMENT WORKERS IN UNIVERSITY MALAYA
MEDICAL CENTRE**



**MASTER OF SCIENCE
UNIVERSITI UTARA MALAYSIA
April 2019**

**WORKPLACE VIOLENCE AGAINST EMERGENCY DEPARTMENT
WORKERS IN UNIVERSITY MALAYA
MEDICAL CENTRE**



By

SAIDAH BINTI SATDERI

Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In Partial Fulfilment of the Requirement for Master of Science (Occupational Safety
and Health Management)



**Pusat Pengajian Pengurusan
Perniagaan**

SCHOOL OF BUSINESS MANAGEMENT

Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)

SAIDAH BINTI SATDERI (822469)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)

MASTER OF SCIENCE (OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT)

telah mengemukakan kertas penyelidikan yang bertajuk
(has presented his/her research paper of the following title)

**WORKPLACE VIOLENCE AGAINST EMERGENCY DEPARTMENT WORKERS
IN UNIVERSITI MALAYA MEDICAL CENTRE**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the research paper).

Nama Penyelia : **PROF. MADYA DR. MOHD FAIZAL BIN MOHD ISA**
(Name of Supervisor)

Tandatangan
(Signature)

:

Tarikh : **7 April 2019**
(Date)

PERMISSION TO USE

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the University Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
06010 UUM Sintok



ABSTRACT

Healthcare workers are at higher risk to the exposure of workplace violence by sixteen times compared to any other professional. Emergency Department (ED) are at a greater risk of such events. The objectives of this study were to describe the frequency, the contributing factors and the reporting of workplace violence against ED workers in University Malaya Medical Centre (UMMC), as well as to identify if there is any significant difference in frequency of violence, the feeling of safety and the level of confidence when dealing with workplace violence, based on demographic and occupational characteristics. A cross-sectional study design was conducted from November to December 2018 using quota sampling technique. The questionnaire was adapted from Alshehri (2016) and Kowalenko et al., (2013). Descriptive statistics, Independent t-test, and Analysis of Variance (ANOVA) were used to analyze the data. Two hundred and twenty-six ED workers in UMMC completed the survey. The most common types of violence found to be verbal abuse (100%), followed by physical violence (53%), threats (44%) and sexual harassment (32%). Workplace violence was frequent in the ED of UMMC with each worker experienced at least one episode of verbal abuse in the past 12 months. 'Waiting time to receive service' and 'failure to fulfil patients or visitors desire' were the most common contributing factors for violence in ED. Majority of the victim did not report the violent incident with 'no benefit in writing' and 'incident was not important' being the common reason. There was a statistically significant difference in the frequency of violence based on education and occupation. Nurses were the most exposed profession to workplace violence compared to other professions. Those with less working experience and Healthcare assistant significantly felt less safe compared to other professions in the ED. Those with more experience, being male, and working as Security guard felt more confident in managing violence at the workplace. Understanding the nature of violence in the workplace is the first step before further developing effective strategies to manage the problem. Enforcement of policies, and establishing a continuous training program could enhance workplace safety for healthcare workers.

Keywords: workplace violence, safety, confidence, emergency department.

ABSTRAK

Kakitangan kesihatan berisiko terdedah kepada keganasan tempat kerja enam belas kali ganda lebih tinggi berbanding kumpulan profesional yang lain. Jabatan Kecemasan merupakan kawasan paling tinggi risiko untuk berlakunya kejadian tersebut. Objektif kajian ini adalah untuk menerangkan kekerapan, faktor-faktor yang menyumbang, dan laporan keganasan tempat kerja terhadap pekerja Jabatan Kecemasan di Pusat Perubatan Universiti Malaya (PPUM) disamping mengenal pasti jika terdapat sebarang perbezaan yang signifikan dalam kekerapan kejadian keganasan, perasaan selamat, dan keyakinan dalam menangani kejadian keganasan berdasarkan ciri-ciri demografik dan pekerjaan pekerja. Kajian keratan rentas telah dijalankan daripada November hingga Disember 2018 menggunakan teknik pensampelan kuota. Soalan kaji selidik telah diadaptasi dari Alshehri (2016) dan Kowalenko et al., (2013). Statistik deskriptif, 'Independent t-test', dan Analysis of Variance (ANOVA) telah digunakan untuk menganalisa data. Dua ratus dua puluh enam pekerja Jabatan Kecemasan di PPUM telah turut serta dalam kaji selidik. Keganasan yang paling kerap berlaku adalah gangguan lisan (100%), diikuti dengan keganasan fizikal (53%), ancaman (44%), serta gangguan seksual (32%). Keganasan tempat kerja adalah kerap di Jabatan Kecemasan PPUM di mana setiap peserta pernah menghadapi gangguan lisan sekurang-kurangnya sekali sepanjang 12 bulan yang lalu. 'Masa menunggu untuk menerima rawatan' dan 'kegagalan memenuhi kehendak pesakit atau pelawat' merupakan faktor yang paling banyak menyumbang kepada keganasan di Jabatan Kecemasan. Kebanyakan mangsa keganasan tidak melaporkan kejadian tersebut dengan alasan 'tiada faedah dalam melaporkan' dan 'kejadian tidak penting' sebagai alasan paling banyak diberikan oleh peserta. Terdapat perbezaan yang signifikan dalam kekerapan keganasan berdasarkan pendidikan dan pekerjaan. Jururawat lebih kerap terdedah kepada keganasan berbanding profesional yang lain. Pekerja yang kurang berpengalaman, dan juga Penolong Perawatan Kesihatan secara signifikannya kurang berasa selamat di tempat kerja berbanding profesional yang lain. Pekerja yang mempunyai lebih pengalaman, lelaki, dan juga Pengawal Kesihatan berasa lebih yakin dalam menangani keganasan di tempat kerja. Memahami sifat kejadian keganasan merupakan langkah pertama sebelum menggubal strategi berkesan untuk mengurus masalah keganasan. Penguatkuasaan polisi serta penubuhan program latihan berterusan dapat meningkatkan keselamatan di tempat kerja.

.

Kata kunci: Keganasan tempat kerja, keselamatan, keyakinan, jabatan kecemasan.

ACKNOWLEDGEMENT

First and foremost, I would like to thank Allah SWT for giving me the strength, knowledge, ability and opportunity to undertake this research study and to persevere and complete it satisfactorily. Without his blessings, this achievement would not have been possible. My special and heartily thanks to my supervisor, Assoc. Prof. Dr. Mohd Faizal Bin Mohd Isa who has been there providing his heartfelt support and guidance at all times throughout the completion of this paper. It is with his supervision that this work came into existence. His precious time, thoughtful comments and advices were valued greatly. To my mother, Husna Binti Hamdi, and my family that had always been my biggest source of strength, thank you for all the duas and moral support. I am eternally grateful to have all of you around. I am also deeply thankful to my colleagues and friends, Gayathri Naidu A/P Ramakrishnan, Rabiatal Adawiyah Roslan, Noor Azura Binti Muda and Wan Mahirah Binti Wan Musa for their encouragement and support that has given me the confidence to go through this challenging journey. I am also thankful to the University Malaya Medical Centre that allowed me to conduct this research in their organization. Finally, I thank everyone who directly or indirectly involved and contributed to the completion of this thesis.

TABLE OF CONTENT

Title	Page
TITLE PAGE	i
CERTIFICATION OF THESIS WORK	ii
PERMISSION TO USE	iii
ABSTRACT	iv
ABSTRAK	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENT	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xii
LIST OF APPENDICES	xiii
 CHAPTER ONE: INTRODUCTION	
Introduction	1
1.1 Background of study	1
1.2 Problem statement	4
1.3 Research question	8
1.4 Objectives of the study	8
1.5 Significant of the study	9
1.6 Scope of the study	10
1.7 Operational definition	12
1.8 Organization of the thesis	14
 CHAPTER TWO: LITERATURE REVIEW	
Introduction	15
2.1 Overview of workplace violence	15
2.1.1 Types of workplace violence	17
2.1.1.1 Physical violence	18
2.1.1.2 Verbal abuse	19
2.1.1.3 Threatening behaviour.....	19
2.1.1.4 Sexual harassment	20
2.1.2 Definition	20
2.2 Prevalence of workplace violence in healthcare	22
2.2.1 Workplace violence in healthcare: Malaysia scenario	23
2.2.2 Prevalence of violence in Emergency Department	25
2.3 Perpetrators of Violence	25
2.3.1 The reason for violence in Emergency Department	27
2.3.1.1 Internal domain	27
2.3.1.2 External domain	27

2.3.1.3 Environmental domain	28
2.3.1.4 Organizational domain	29
2.4 The reporting behaviour.....	29
2.4.1 Reason for not reporting	30
2.5 Demographic and occupational characteristics associated with violence	31
2.5.1 Age	31
2.5.2 Gender	32
2.5.3 Working experience	33
2.5.4 Occupation	33
2.6 Demographic and occupational characteristics associated with the feeling of safety and confidence when dealing with workplace violence	35
2.7 Effects of workplace violence towards healthcare workers	37
2.8 Legislation and guideline in Malaysia.....	39
2.9 Gap in the literature	39
Summary	40

CHAPTER THREE: METHODOLOGY

Introduction	41
3.1 Research methodology flow diagram	41
3.2 Research design	42
3.3 Hypothesis	43
3.4 Population	44
3.4.1 Inclusion and exclusion criteria	45
3.5 Sample size	46
3.5.1 Quota sampling technique	46
3.6 Survey	49
3.6.1 Development of the questionnaire	49
3.6.2 Translation	50
3.6.3 Pretest	51
3.7 Data collection	52
3.8 Data analysis technique	53
3.9 Ethical consideration	54
Summary	54

CHAPTER FOUR : RESULT

Introduction	55
4.1 Response rate	55
4.2 Descriptive analysis	56
4.2.1 Participant's demographic information	56
4.2.2 Frequency by types of violence	58
4.2.3 Frequency of violence by demographic and occupational characteristics.	60
4.2.4 Perpetrator of violence in ED	63
4.2.5 Details of violence incidents	64
4.2.6 Reason for violence incidents	66
4.2.7 System and means of protection available and the procedure for violence	67

4.2.8 Reason for not reporting	69
4.2.9 Safety scale	70
4.2.10 Confidence scale	71
4.3 Inferential analysis	72
4.3.1 Differences in violence based on demographic and occupational characteristics	72
4.3.2 Differences in the feeling of safety based on demographic and occupational characteristics.....	75
4.3.3 Differences in level of confidence based on demographic and occupational characteristics	78
4.4 Summary of hypothesis	81
Summary	81
 CHAPTER FIVE: DISCUSSION	
Introduction	82
5.1 Summary of the study results	82
5.2 Summary of demographic	83
5.3 Workplace violence	84
5.3.1 Frequency of workplace violence	86
5.3.2 Factors contributing to workplace violence	89
5.3.3 Reporting behaviour.....	90
5.3.4 Demographic and occupational characteristics associated with safety, and level of confidence when dealing with workplace violence.....	91
5.5 Benefit of the study	94
5.6 Limitation of the study	95
5.7 Future research	96
5.8 Recommendation	96
5.9 Conclusion	98
REFERENCES.....	99

LIST OF TABLES

Table 2.1 Morrison's hierarchy of aggressive and violent behaviours	18
Table 3.1 Distribution of professions in the Emergency Department of UMMC..	44
Table 3.2 Suggested of sample size according to the number population	46
Table 3.3 Quota sampling techniques	48
Table 4.1 Response rate.....	55
Table 4.2 Summary of participant's demographic information	57
Table 4.3 Frequency by types of violence in the ED of UMMC	59
Table 4.4 Frequency of violence in the ED by demographic characteristics.....	62
Table 4.5 Perpetrators of violence	63
Table 4.6 Details of violence incidents	65
Table 4.7 The reason for violence in the ED of UMMC.....	66
Table 4.8 System and means of protection available and the procedure for violence	68
Table 4.9 Reason for not reporting violence	69
Table 4.10 Safety scale	70
Table 4.11 Confident scale	71
Table 4.12 Differences in frequency of violence based on demographic and occupational characteristics	73
Table 4.13 Post Hoc Test for difference in violence based on occupation	74
Table 4.14 Differences in the feeling of safety based on demographic and occupational characteristics	76
Table 4.15 Post Hoc Test for difference in the feeling of safety based on working experience	77
Table 4.16 Post Hoc Test for difference in the feeling of safety based on occupation.	77
Table 4.17 Differences in the feeling of confident based on demographic and occupational characteristics.....	79
Table 4.18 Post Hoc Test for difference in the level of confidence based on occupation	80
Table 4.19 Summary of hypothesis	81

LIST OF FIGURES

Figure 3.1 Research methodology flow diagram	41
Figure 4.1 Comparison of frequency by types of violence in the ED of UMMC.....	59
Figure 4.2 Comparison of the perpetrator by types of violence in the ED of UMMC.....	63
Figure 4.3 Comparison of percentage and types of physical assault in the ED of UMMC.....	65



LIST OF ABBREVIATIONS

WPV	Workplace Violence
WHO	World Health Organization
OSHA	Occupational Safety and Health Administration/Act
ED	Emergency Department
UKMMC	University Kebangsaan Malaysia Medical Centre
UMMC	University Malaya Medical Centre
ILO	International Labour Office
ICN	International Council of Nurses
GAVEN	Global Approach to Violence towards Emergency Nurses
CCTV	Closed-Circuit Television
EMT	Emergency Medical Technician
PTSD	Post Traumatic Stress Disorder
SPSS	Statistical Package for Social Sciences
MREC	Medical Research Committee

LIST OF APPENDICES

Appendix A Participant's information sheet	116
Appendix B Consent form	120
Appendix C Research questionnaire	121
Appendix D Ethics approval letter	133



CHAPTER 1

INTRODUCTION

Introduction

This chapter comprises of the background of the study, problem statement, research questions, objectives of the study, significant of the study, the scope of the study, operational variables, and organization of the study.

1.1 Background of the Study

Over the past decades, the incidence of workplace violence (WPV) keep increasing and continuously affecting employers and employees (Harrell, 2011; Zhang et al., 2017). The stories of violence in the workplace have been depicted in almost every form of media nowadays and as the negative consequences it brought to the organization, the management could not let the issues to be ignored (Al-Omari, Johari, & Choo, 2012)

The World Health Organisation (WHO) defines workplace violence as “incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health”. Enforcement activities typically focus on physical assaults or threats that result or can result in serious physical harm. However, many studies on this issue and the workplace prevention programs highlighted such verbal violence like threats, verbal

abuse, hostility, sexual harassment which can cause significant psychological trauma and stress, even if no physical injury takes place. Besides, verbal assaults can also escalate to physical violence (Occupational Safety and Health Administration, 2015).

Workplace violence is a widespread problem worldwide with it peaks in the healthcare professions (Ashton, Morris, & Smith, 2018; Han et al., 2017; Ramacciati, Ceccagnoli, Addey, & Rasero, 2018; Talas, Kocaöz, & Akgüç, 2011; Zhang et al., 2017). The United States Bureau of Labour Statistics data shows that the rate of hospital employees intentionally injured on the job at the hands of another person is significantly higher than the rate across all private industries. On average, the incidents of serious workplace violence in which the injured worker given days off to recover, were four times more common in healthcare compare to private industry (Occupational Safety and Health Administration, 2015). In 2015 alone, there were 8.5 cases of injuries per 10,000 full-time hospital workers, versus 1.7 cases for all private industries (Occupational Safety and Health Administration, 2016).

Workplace violence in the healthcare setting has been documented as a significant problem specifically in Emergency Department (Alyaemni & Alhudaithi, 2016; Ashton et al., 2018; Çıkrıklar et al., 2016; Han et al., 2017; Hogarth, Beattie, & Morphet, 2016; Ramacciati, Ceccagnoli, Addey, Lumini, & Rasero, 2017; Taylor & Rew, 2010). It is an important issue as it can affect employees, clients, customers and visitors, which also included physical and emotional harm (Wolf, Delao, & Perhats, 2014). Previous study by Kalemoglu and Keskin reported that verbal and physical attacks by patients and their relatives are the most

important factors contributing to stress among Emergency Department (ED) employees (as cited in Çıkırlar et al., 2016), as well contributing in the reducing of work productivity that affects quality of patient care (Gates et al., 2011). Ozcan and Bilgin reported that consistent exposure to high-stress conditions resulting from exposure to verbal and physical violence results in both physical and mental exhaustion which can further lead to burnout syndrome among employees (as cited in Çıkırlar et al., 2016).

Regardless of the increasing incidents, workplace violence in medical occupations only represent 10.2% of all incidents. It was suggested that workplace violence is underreported in which the actual rates may be much higher (Occupational Safety and Health Administration, 2016). Previous studies conducted in Turkey revealed that 60% of ED employees who were exposed to violence did not report the incident. Among the reasons for not reporting was a lack of confidence in health care and executive leadership as well as the justice system. A study by Camci and Kutlu found about the high underreporting cases and the most highlighted reason (34.9%) for not reporting was the perception that “no resolution will be reached” (as cited in Çıkırlar et al., 2016).

Violence in the Emergency Department not only affects health care providers directly but also jeopardize patient safety and their right to medical care. Although the International Council for Nurses (International Council of Nurses, 2009), the Emergency Nurses Association (2014), and the Australian Nurse Association have all issued statements denouncing workplace violence, instances continue to occur at hospitals and clinics around the world (Han et al., 2017).

In Malaysia health care setting, workplace violence is a serious problem (Department of Statistics 2002), yet there has been a very limited number of available scientific evidence on the topic in the country to be supported empirically (Zainal, Rasdi, & Saliluddin, 2018).

1.2 Problem Statement

There is a higher risk of workplace violence against healthcare workers compared to any other professional group by sixteen times (Vogel, 2016). In a recent case at Boston hospital, in January 2015, a surgeon was shot dead by the son of a deceased patient (Phillips, 2016). Meanwhile, there was a case at the National Malaysia University Hospital (HUKM) where a relative of a patient threatens to shoot the hospital staff after being denied from accompanying his wife in the treatment room (Lau, 2016).

In University Malaya Medical Centre (UMMC), there were two highlighted cases, one which staff were threatened by a group of people to be beaten with sticks if their family member was not treated, and another one was involving two fighting gangs that end up on the member brought to the ED, and the medical team were then threatened while resuscitating the victim (Edwards, 2016).

The Health Director-General of Malaysia, Datuk Dr Noor Hisham Abdullah when speaking to the media said that violence at the workplace is an occupational hazard levelled towards medical staff at their workplace. Among the professions that facing physical, verbal and

even sexual aggression and violence in the hospital are the doctors, nurses and pharmacists. "Healthcare workers have been accused of neglecting their patients as well as humiliated on social media even though the allegations cannot be substantiated," he added. Dr Noor Hisham also mentioned about the incidences where healthcare workers were accused of being murderers, punched and roughed up physically, adding that there were instances where they received death threats (Muthiah, 2017).

The dean of UKMMC Faculty of Medicine, Professor Dr Zaleha Abdullah Mahdy said that even though the hospital has set up a complaint and feedback system, yet the offenders are still acting recklessly, and in some case, patients have taken pictures of employees and threatened to slander them on social media over grievances (Lau, 2016). She also mentioned that as a caregiver, staffs are not allowed to respond in those situations with shouting back or get physical (Edward, 2016).

It is seen as a serious threat to hospital staff when the physical and verbal abuse towards healthcare workers incidents being viralized on social media. Datuk Dr Noor Hisham Abdullah said apart from physical injuries, the staff could also suffer mental and emotional stress which would affect their work quality in delivering the best service to the people (Bernama, 2017).

21 cases of staff abuse were recorded in UMMC from April 2012 to May 2016 (Edwards, 2016). Despite numbers of such abusive cases reported, the ministry somehow certain that there were many more cases not reported by the healthcare employees (Bernama, 2017).

On the other hand, a study done in UMMC found that being posted to ED were associated with a higher mean score of burnout among junior doctors especially among those early in the houseman-ship for having to cope with demanding situations such as in the ED (Zuraida & Zainal, 2015). Ozcan and Bilgin revealed that Burnout syndrome could emerge from consistent exposure to high-stress conditions resulting from exposure to verbal and physical violence (as cited in Cıkırlar et al., 2016).

A descriptive cross-sectional study has been done on the experience of workplace violence specifically towards nurses in University Kebangsaan Malaysia Medical Centre (UKMMC) found that approximately one nurse is being abused every other day with verbal abuse being the most common violence, followed by verbal threat, during the three months of study period (Ruth, Samsiah, Hamidah, & Lp, 2009).

Meanwhile, in a recent study particularly done on sexual harassment among registered nurses working in government hospitals in Melaka state, Malaysia, revealed that prevalence of sexual harassment among these nurses was increasing, that 51.2% incidence recorded compared to the previous year which only 22.8% of recorded incidence. Sadly, from 54.9% of those experienced sexual harassment, only 9.8% of the nurses report the incidence which gives rise to the underreporting cases. The study also discloses that most

of the victims (74.7%) suffered from the psychological effect which attributed to various types of sexual harassment encountered at work (Suhaila & Kg, 2012).

Nonetheless, there is a knowledge gap in which most of study of workplace violence in healthcare either inside or outside Malaysia were focusing on nurses profession instead of all workers in the Emergency Department (ALBashtawy & Aljezawi, 2016; Alyaemni & Alhudaithi, 2016; Banda, Mayers, & Duma, 2016; Han et al., 2017; Hogarth et al., 2016; Ramacciati, Ceccagnoli, & Addey, 2015; Ramacciati et al., 2017; Ramacciati et al., 2018; Zhang et al., 2017).

However, one particular study in Turkey which include all the professions in ED found that the rate of workplace violence including physical assaults, verbal abuse or verbal threat were highest towards security officers and the housekeepers (Talas et al., 2011). It is crucial to explore if the situation is the same with UMMC so no profession left out in prevention activities to reduce the rate of workplace violence in UMMC's Emergency Department.

In short, the information on workplace violence in the ED of UMMC is scarce. There is very little specific data on who are the victims, who are the perpetrators, what are the contributing factors, and why are some victims choose to remain silent. Workplace violence is hazardous and needs to be addressed effectively for a safe system of work. Empirically, to the extent of my knowledge, none of the studies on workplace violence in a health care setting in Malaysia acknowledged the various professions in the Emergency Department. Furthermore, this will be the first study in Malaysia to investigate employees

feeling of safety and level of confidence when dealing with workplace violence based on demographic and occupational characteristics.

1.3 Research Question

1. What is the frequency of workplace violence against Emergency Department workers in UMMC?
2. What are the contributing factors for workplace violence against Emergency Department workers in UMMC?
3. What is the reporting behaviour of workers exposed to violence in the Emergency Department of UMMC?
4. Is there any significant difference in the frequency of violence based on demographic and occupational characteristics of Emergency Department workers in UMMC?
5. Is there any significant difference in the feeling of safety and level of confidence when dealing with workplace violence among Emergency Department workers in UMMC, based on demographic and occupational characteristics?

1.4 Objectives of the Study

In reference to the problem which has been discussed and stated above, the principal objective for this study would now be the occurrence of violence against Emergency Department workers in University Malaya Medical Centre, but in a more specific sense;

1. To describe the frequency of workplace violence against Emergency Department workers in UMMC.

2. To identify the contributing factors for workplace violence against Emergency Department workers in UMMC.
3. To identify the reporting behaviours of workers exposed to violence in the Emergency Department of UMMC.
4. To identify if there any significant difference in the frequency of violence based on demographic and occupational characteristics of Emergency Department workers in UMMC.
5. To identify if there any significant difference in the feeling of safety and level of confidence when dealing with workplace violence among Emergency Department workers in UMMC, based on demographic and occupational characteristics.

1.5 Significant of the Study

The administrators and management of University Malaya Medical Centre (UMMC) would find this research useful in understanding the occurrence of violence against Emergency Department workers in the organization.

By the addressing the frequency according to the types of violence and the perpetrators as well as the reason of the violence, it is easier to tackle the issues at its root thus make a prevention plan more effective. In term of reporting behaviour, this study will reveal the true extent of violent incidents occurring in the Emergency Department which were unknown before as the problematic under-reporting issues. From the findings of the study, the management would understand the reason behind under-reported cases and improvement action could be taken to solve the issue.

Moreover, by identifying whether feelings of safety and level of confidence when dealing with workplace violence are related to demographic and occupational characteristics, it acknowledged the various position in Emergency Department and how these different professions managing violence incidents they encountered. The findings of this research will comprehensively address workplace violence in ED that would be of crucial benefit to UMMC organization, which intend to make efforts at improving safety, mental and physical health of the workers.

This research is beneficial because it would attempt to contribute to knowledge on the topic of workplace violence. This study would also propose understanding and ideas that will become the foundation for the furthering of upcoming explorations. Regarding its contribution in the area of practice, the study would attempt to guide other researchers, healthcare management, and the central government in the formation, or improvement, of policies that will lead to a regime where workplace violence against emergency department workers issues will not be taken for granted.

1.6 Scope of the Study

University Malaya Medical Centre is a teaching hospital under the Ministry of Higher Education Malaysia and is a body statutory set up under University of Malaya Statute (University Malaya Medical Centre) 2000, University Act and University College of 1971, the Constitution of University Malaya. University Malaya Medical Centre which previously known as University Hospital accommodate more than 1000 patient bed and

more than 5000 workers. It also works as a learning centre providing training for medical staff and paramedics in the healthcare industry. It is UMMC's vision to be a world-renowned medical centre providing highest quality healthcare, medical training and research according to International Standards. According to the annual report, University Malaya Medical Centre has treated 1,082,094 patients in 2016 compared to 1,034,953 in 2015 which shows an increment of 4.55% (University Malaya Medical Centre [UMMC], 2016).

The scope of this study shall cover the Emergency Department of University Malaya Medical Centre. The range of the study will cover all the Emergency Department workers whose job involve in direct contact with patients and visitors. It would include the Physicians, Medical assistants, Nurses, Pharmacists/Pharmacist assistants, Radiographers, Healthcare assistants, Clerks, and Security guards.

University Malaya Medical Centre, as a teaching hospital was chosen since a typical teaching hospital will accept various cases including the complicated one as they welcome new or rare cases for study purposes. Shahian, Liu, Meyer, and Normand (2014) reported that teaching hospital is significantly more likely to provide care for minorities and patients requiring a transfer from other institutions for advanced care which means allowing more patients and visitors of various background.

There is currently two teaching hospital in the capital city of Malaysia, Kuala Lumpur that is University Malaya Medical Centre (UMMC), and University Kebangsaan Malaysia Medical Centre (UKMMC). UMMC were specifically chosen rather than UKMMC

because of statistical data of outpatient from Emergency Department in UMMC were higher than UKMMC with total 106547 and 65908 patients respectively. The higher numbers of patients increase the risk of ED workers exposure to violence.

The reason why Emergency Department worker are the focus of these study is simply because they contribute enormously to UMMC reputation while facing hundreds of new faces of patients and the visitors with varies medical reason, every single day. This is notable because emergency staff play critical roles as the paramedic team that would be the first to attend the patients and the visitors. Nonetheless, a lot studies (Alyaemni & Alhudaithi, 2016; Ashton et al., 2018; Çıkırlar et al., 2016; Han et al., 2017; Hogarth et al., 2016; Ramacciati et al., 2017; Taylor & Rew, 2011) agreed that Emergency Department is a vulnerable setting for workplace violence.

This study was only focusing on a particular organization as there is time constraints as well as the limited budget to conduct the research.

1.7 Operational Definition

Below are the operational definitions for each main term used in this study:

Emergency Department (ED) is referred to a health care setting in which patients receive accident and emergency services and initial, stabilising treatment for medical, surgical and/or mental health care (Taylor & Rew 2010).

Workplace Violence (WPV) is any “physical assault, emotional or verbal abuse, or threatening, harassing, or coercive behaviour in the work setting that causes physical or emotional harm” (Wolf et al., 2014, p. 305).

Physical violence is defined as “the use of physical force against an individual involving physical contact, such as beating, kicking, slapping, stabbing, shooting, pushing, biting, and pinching, regardless of whether or not an injury was sustained” (Abbas and Selim, 2011, p. 1050).

Verbal abuse is defined as “the use of words which are personally insulting, such as generally abusive spoken obscenities and foul language, or indicating a lack of respect for the dignity and worth of an individual” (Abbas and Selim, 2011, p. 1050).

A threat is defined as "any action that involves signs of violence indicating an intention to harm, such as the intention to throw a chair, cause a fight or to verbally threaten an individual" (Abbas and Selim, 2011, p. 1050).

Sexual harassment is defined as "any unwanted behaviour of a sexual nature, including verbal or physical, which is offensive to an individual or for the perpetrator's own sexual gratification" (Abbas and Selim, 2011, p. 1050).

1.8 Organization of the Thesis

The write up of this research will be carried out in five chapters. The first chapter will cover the background of the study, the organizational information, statement of problems, objectives, research questions, the significance of the study, the scope of the study, and operational definition of terms and organization of the study. Next, in chapter two, it shall review the prevalence, types of violence, the contributing factors of violence event, the perpetrators and the reason of the violence, the reporting behaviour of ED workers and the feeling of safety as well as the feeling of confident of workers when dealing with WPV. In chapter three, it will be describing the research design, population and sample, data collection instruments, sources and proposed procedures for data analysis in order to achieve the previously stated aim and objectives of revealing the occurrence violence against emergency workers in UMMC. The various methods and techniques to be employed for data collection and analysis were mentioned in detail. The result of the study will be presented in chapter four, while the discussion on the result and the whole study will be described thoroughly in chapter five.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter comprises of the overview of workplace violence, the prevalence, types of violence, the perpetrators and the reason of the violence, the contributing factors for violence, the reporting behavior of violence among workers, the legislation, the demographic and occupational characteristics associated with frequency of violence, feeling of safety, and confidence level of ED workers when dealing with violence at the workplace.

2.1 Overview of Workplace Violence

Workplace violence is an increasing event over the years (Harrell, 2011; Zhang et al., 2017) and this worldwide problem peaks in health care sector (Ashton, Morris, & Smith, 2018; Han et al., 2017; Ramacciati et al., 2018; Talas et al., 2011; Zhang et al., 2017).

The impact of violence could vary ranging from psychological abuse to physical injury, or even death (Centre for Disease Control and Prevention [CDC], 2018). Most of the study on the subject reported that there were consequences mainly to morale, such as irritation, anger, fear, anxiety, depression, humiliation, guilt, feelings of helplessness, and disappointment towards assaulted or mostly, abused professionals (Fafliora, 2015; Ferri, Silvestri, Artoni, & Lorenzo, 2016; Magnavita & Heponiemi, 2012; Park, Cho, & Hong, 2015; Terzoni et al., 2015). These feelings may contribute to the lack of empathy among

health care workers (Ferri, Guerra, Marcheselli, Cunico, & Lorenza, 2015), as well as leading to job burnout (Alameddine, Mourad, & Dimassi, 2015) and job turnover (Estryn-Behar et al., 2008) [as cited in Terzoni et al., 2015].

Oftentimes, Violence narrowly defined as the use of physical force to harm someone (Zhulaska and Piantkovska 2016). It was then further explained by Alkorashy and Al Moalad (2016) as “physical harassment, sexual abuse, aggression, mobbing and bullying”.

Workplace violence (WPV) according to National Institute for Occupational Safety and Health (NIOSH), is the act or threat of violence, ranging from verbal abuse to physical assaults directed towards persons at work or on duty (CDC, 2018). Ayranci , Yenilmez, Gunay, and Kaptanoglu had similar definition and specifically acknowledged violence in health care sector as “risk to a health a worker due to threatening behavior, verbal threats, physical assault and sexual assault committed by patients, patient’s relatives, or any other person” (as cited in Kocabiyik, Yildirim, Turgut, Turk and Ayer, 2015).

Generally, workplace violence defined as any physical assault, emotional or verbal abuse, or threatening, harassing, or coercive behaviour in the work setting that causes physical or emotional harm (Wolf et al., 2014). To get a general knowledge of workplace violence are not easy for cultural and regional differences as well as variation in definitions and reporting progress (Zhang et al., 2017).

For the purpose of this study, the definition for workplace violence has been adopted from the Joint Programme on Workplace Violence in the Health Sector by the collaboration of International Labour Office (ILO) and World Health Organization (WHO), the International Council of Nurses (ICN), and Public Services International. It defines

Workplace violence as “incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health” (International Labour Office et al., 2002, p. 3). This definition has been chosen as it is the most universally accepted definition of workplace violence and has been cited in many professional publications, regulatory reports, and guidelines (Craig, 2016).

2.1.1 Types of workplace violence

In order to understand the issue better, it is necessary to identify the types of violence. Workplace violence can simply be classified into physical or non-physical (Talas et al., 2011). Physical violence involves direct physical contact towards victims while non-physical violence does not involve direct physical contact to the victim. In most of the reported cases, non-physical violence was more common than physical violence (Alshehri, 2017; Alyaemni & Alhudaithi, 2016; Çıkırlar et al., 2016; Kowalenko, Gates, Gillespie, Succop, & Mentzel, 2013; Talas et al., 2011).

Morrison's hierarchy of aggressive and violent behaviour presented 8-level taxonomy for such incidents which higher score indicate minor events, whereas lower score indicates more serious harm (Morrison, 1994). The taxonomy is outlined in the table below:

Table 2.1

Morrison's hierarchy of aggressive and violent behaviours

Level	Definition	Physical or non-physical
1	Inflicted serious harm requiring medical care	Physical
2	Inflicted low-grade harm requiring no medical care	Physical
3	Made a verbal threat with a plan to inflict harm	Non-physical
4	Touched another in a threatening way	Physical
5	Made a verbal threat without a plan to inflict harm	Non-physical
6	Approached another person in a threatening way	Non-physical
7	Was loud and demanding	Non-physical
8	Exhibited low-grade hostility	Non-physical

A study by Ikiw-Lavalle and Grenyer which conducted on patients and staffs, using Morrison's hierarchy of aggressive and violent behaviours, has found that the most indicated level was level 2, 3, and 7 (as cited in Alshehri, 2017).

2.1.1.1 Physical violence

There are different forms of violence and it is crucial to acknowledge the distinction. Pushing, kicking and slapping are the example of the physical forms violence (Alshehri, 2017). Talas et al., (2011) added smacking, pinching, scratching or beating, throwing an object, cutting and piercing with a weapon, being repelled and being spat on, into the definition. Furthermore, Kowalenko et al. (2013); Gates et al. (2011) and Gillespie, Gates,

Kowalenko, Bresler and Succop, (2014) includes hitting with the body part, biting, pulling hair, hitting with an object, stabbing, squeezing and, and twisting as physical violence. All those physical contacts involved against and an individual should considered physical violence whether or not resulted in injury (Abbas & Selim 2011).

2.1.1.2 Verbal abuse

Abbas and Selim (2011) defined verbal abuse as “the use of words which are personally insulting, such as generally abusive spoken obscenities and foul language, or indicating a lack of respect for the dignity and worth of an individual” (p. 1050). It was explained by Gates et al., (2011) as “cursing, cussing, yelling or berating a person in front of others, racial slurs or humiliating and patronizing action” (p. 306). Talas et al., (2011) the further includes “inappropriate, offensive, rude or hostile behavior; being belittled or humiliated; being verbally threatened with beating, kicking, killing, cutting and piercing, hanging and firing, being assigned to remote area, being fired, and fighting outside later as forms of verbal abuse” (p. 198).

2.1.1.3 Threatening Behaviour

It defined as "any action that involves signs of violence indicating an intention to harm, such as the intention to throw a chair, cause a fight or to verbally threaten an individual." (Abbas & Selim, 2011, p. 1050). Threatening behaviour can be both physical or verbal violence (Alshehri, 2017). As explained by Kowalenko et al. (2013) and Gates et al. (2011), physical threats should include actions, statements, and written or nonverbal messages conveying threats of physical injury, which were serious enough to unsettle one mind. It

includes expressions of intent to inflict pain, injury, or punishment. Verbal threat uses words to threaten harm (physically or other) to an individual (Alshehri, 2017).

2.1.1.4 Sexual Harassment

Sexual harassment according to Gates et al. (2011) includes such unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct of a sexual nature, insulting gestures, whistling, jokes or humor about gender-specific traits, offensive pictures, and offensive contact such as patting, pinching, brushing against body, attempted or actual fondling, or kissing. Given the similar definition, Talas et al. (2011) added a few more to it including being subjected to unwanted sexual jokes, stories, questions, or words, being unwillingly asked out, receiving telephone calls or unwanted mail, and being sexually shown someone's body. Abbas and Selim (2011) somehow simplified it as "any unwanted behaviour of a sexual nature, including verbal or physical, which is offensive to an individual or for the perpetrator's own sexual gratification" (p. 1050)

2.1.2 Definition

Despite various definition in the literature from the different regional and cultural differences, there is agreement at some point in which workplace violence can be categorized as physical violence (violence involving physical contact, such as beating, kicking, slapping, and stabbing), verbal abuse (mistreatment through words or tone, such as disparagement and disrespect), threats (promised use of physical or psychological force

resulting in fear of negative consequences), sexual harassment, and bullying (repeated offensive behaviors that attempt to humiliate an individual) (Boyle & Wallis, 2016).

Considering the setting, this study specifically highlighted the most common form of violence that occur in the emergency department including physical violence, verbal harassment, threats, and sexual harassment (Alshehri, 2017). The following definitions of types of violence used for this study were developed and have been used in previous research by the researchers Abbas and Selim (2011, p. 1050):

Physical violence is defined as “the use of physical force against an individual involving physical contact, such as beating, kicking, slapping, stabbing, shooting, pushing, biting, and pinching, regardless of whether or not an injury was sustained”.

Verbal abuse is defined as “the use of words which are personally insulting, such as generally abusive spoken obscenities and foul language, or indicating a lack of respect for the dignity and worth of an individual”.

A threat is defined as "any action that involves signs of violence indicating an intention to harm, such as the intention to throw a chair, cause a fight or to verbally threaten an individual."

Sexual harassment is defined as "any unwanted behaviour of a sexual nature, including verbal or physical, which is offensive to an individual or for the perpetrator's own sexual gratification".

2.2 Prevalence of workplace violence in Healthcare

Workplace violence is expansive worldwide and most common in the healthcare professions (Ashton et al., 2018; Han et al., 2017; Ramacciati et al., 2018; Talas et al., 2011; Zhang et al., 2017). The United States Bureau of Labour Statistics data shows that the rate of hospital employees intentionally injured on the job at the hands of another person is significantly higher than the rate across all private industries. On average, the incidents of serious workplace violence in which the injured worker given days off to recover, were four times more common in healthcare compare to private industry (Occupational Safety and Health Administration, 2015).

In 2015 alone, there were 8.5 cases of injuries per 10,000 full-time hospital workers, versus 1.7 cases for all private industries. Six of every 100 full-time hospital employees are injured on the job, which is higher than the injury rate for those working in manufacturing and construction (United State Department of Labor, 2017).

According to Thompson (2015), approximately 11,000 healthcare workers being assaulted annually. Kowalenko et al. (2013) in a study involving 6 hospitals in America reported that out of 827 violent events against health care workers, 601 were physical threats, and 226 were physical assaults.

In short, health care workers are 16 times more likely to expose to workplace violence compare to any other professional group, thus clearly shown that health care settings are a high-risk environment for the violence to take place (Vogel, 2016).

2.2.1 Workplace Violence in Healthcare: Malaysia Scenario

Shamsudin and Rahman (2006) addressed workplace in Malaysia and the relevance of the Occupational Safety and Health Act (OSHA) 1994. It argued that the two statutory legislation in tackling human risk which the Penal Code and Employment Act 1995 ineffectively addressed the issue of workplace violence, hence proposed the use of OSHA 1994 to complement other legal mechanisms to manage and prevent workplace violence in Malaysia.

Ahmad and Mazlan (2013) study on the mental health problems that contribute to work-related violence among security guard in Peninsular Malaysia with an interesting finding that showed the presence of five subtypes of mental health problem were notable among participants after the consideration that the population were not being in the setting of psychiatric or prison.

In 2014, Kamaluddin, Shariff, Othman, Ismail and Saat (2014) examined the association between personality traits and aggressive behaviour which finding showed there was a significant association that may lead to committing an offence by an individual.

To date, there is a very little study on workplace violence in the healthcare setting in Malaysia. A descriptive cross-sectional study has been done on the experience of workplace violence specifically towards nurses in University Kebangsaan Malaysia Medical Centre (UKMMC) found that approximately one nurse is being abused every other day with verbal abuse being the most common violence, (31.9%) followed by verbal threat (23.7%), during the three months of study period. The violence incidences mostly took place in the surgical ward (20%) followed by the emergency department and critical care

area, each experiencing 18% of incidents. Patients (40.6%), were the major perpetrators of the incidence, followed by patient's relatives (37.5%) and others (12.5%). From the result, it was suggested that workplace violence is a very important problem which should be acknowledged to ensure a safe work environment for the nurses (Ruth et al., 2009).

Meanwhile, in a study specifically done on sexual harassment among registered nurses working in government hospitals in Melaka state, Malaysia revealed that prevalence of sexual harassment among these nurses was increasing, that 51.2% incidence recorded compared to the previous year which only 22.8% of recorded incidence. Sadly, from 54.9% of those experienced sexual harassment, only 9.8% of the nurses report the incidence which gives rise to the underreporting cases. The study also discloses that most of the victims (74.7%) suffered from the psychological effect which attributed to various types of sexual harassment encountered at work (Suhaila & Kg, 2012).

Malaysia recorded relatively high visits made to emergency department corresponds to 2,860.69 visits per 10,000 population, compared to 1,691 per 10,000 population in Singapore (Arunah et al., 2010). The situation of overcrowding patients in the Emergency Department in a Teaching hospital in Malaysia may increase the risk of violence against ED workers as the exceeded service demands over the ability of ED to provide quality care to patients within appropriate time frames (Nik Azlan, Ismail & Azizol, 2013).

2.2.2 Prevalence of Violence in the Emergency Department

Studies had revealed that violent incidents are more likely to occur in the Psychiatry Department, Emergency Department, and in geriatric wards. In many different countries, Emergency Departments and Psychiatric were reported at the greatest risk.

Within the healthcare setting, researchers found that ED as the front door to the emergent needs is the most high- risk, and vulnerable setting for violence (Alyaemni & Alhudaithi, 2016; Çıkırıklar et al., 2016; D. Gates et al., 2011; Han et al., 2017; Hogarth et al., 2016; Kowalenko et al., 2012; Ramacciati et al., 2017; Taylor, 2017).

Among the reason was lack of well trained, armed and visible security guards, as well as exposure to a highly stressful environment (Talas et al., 2011) in which most of the patients need quick and extra attention. Besides, the nature of the Emergency department that it open at all hours is one of the reasons for the vulnerability of the violence (Alyaemni & Alhudaithi, 2016).

2.3 Perpetrators of Violence

The perpetrators of the violence in the health sector can be from patients, patient's relatives, visitors, caregivers, colleagues and leaders (Spector, Zhou & Che, 2014). However, in order to understand it better, the perpetrators of violence in the health sector have been categorized into four types. The first type (Criminal Intent) is when the perpetrator has no relationship to the workplace, the second type (Client or Customer) is when the perpetrator is the customer at the workplace who then becomes violent or aggressive toward a staff member or another client, the third type (Worker-to Worker) is when the perpetrator is the

staff of the workplace including managers, workers, physicians, contract or service staff and volunteer. The fourth type (Personal Relationship) is when a perpetrator is a person that has a relationship with the staff member in the workplace (Registered Nurses' Association of Ontario, 2009).

The most common perpetrators in violence in emergency department are the second types of perpetrator in which violence perpetrated by the patients or patient's relatives with patients as the leading in most studies (AlBashtawy & Aljezawi, 2016; Alyaemni & Alhudaithi, 2016; Banda et al., 2016; Çıkırlar et al., 2016; Talas et al., 2011). In 2012, a follow-up survey on 6,500 ED nurses revealed that in just one previous week, 55% incidence of physical or verbal violence recorded and that was from patients or visitors (Lenaghan, Cirrincione, & Henrich, 2018). In another study, 65.3% of participants stated that the patient's relatives were responsible for the violence, another 27% believe that both patients and relatives were responsible, while 5.2% agreed to solely place responsibility on the patients, and 2.4% participants stated that violence perpetrated by the healthcare professionals (Çıkırlar et al., 2016).

However, patients were not the main source of the violence in a central hospital and community healthcare centre as patients usually admitted with quite serious health conditions to commit such violence (Banda et al., 2016).

Some study had identified the age and the gender of the perpetrator as a great risk factor for the violence incidence {Formatting Citation}. Most of the perpetrators are on the age of below 30 and males are more likely to be aggressive compared to females (Alshehri, 2017).

2.3.1 The Reason of Violence in the Emergency Department

The active interaction between both internal and external factors to the perpetrator resulted in violent incidents (Farell & Shafiei, 2012). According to Global Approach to Violence towards Emergency Nurses (GAVEN) framework by Ramacciati, Andrea and Beniamo (2013), the causes of violence against Accident and Emergency nurses can be divided into four domains including internal, external, environmental and organizational.

The internal domain is the features of ED workers, external domain is the features of patients, family members and/or visitors, Environmental domain is the design of the Emergency Department and Organizational domain including work shifts, presence or absence of security service, anti-workplace violence procedures and so on.

2.3.1.1 Internal Domain

The staffs that lacking in communication skill might be the source of the violence. Besides, there was staff's perception of inappropriate utilization of the Emergency Department by the non-urgent health problem, which arisen a conflict between ED workers and the patients (Ramacciati et al., 2018).

2.3.1.2 External Domain

Some patient had a bad image of the healthcare workers as prejudiced by the media of a few medical malpractices cases in health care which somehow led to distrust of patient with the healthcare workers. Moreover, on the profession wise, staff other than doctors

usually were less respected as they were thought to play a less important role in the determining outcomes. Nonetheless, the most common theme displayed by the patients and relatives is a bad manner due to arrogance and ignorance (Ramacciati et al., 2018).

Prolong waiting time, aggressive people, stress, families and visitors, substance and alcohol abuse, and the 24-hour accessible place make Emergency Department hotbeds of emotional unrest that can turn over into violence. The failure to meet expectations was reflected in a 2016 survey of 227 nurses in Jordan, where nurses reported that the most common reasons for verbal and sometimes physical violence were waiting times, overcrowding and failures to meet patient and family expectations (AlBashtawy & Aljezawi, 2016).

Many studies indicate that ED security generally acknowledged three sources including gang violence, dissatisfied patients, and behavioural health issues (Pati, Pati, & Harvey, 2016).

2.3.1.3 Environmental Domain

Most of Emergency Department workers believe that there is a need to make changes to the working environment for the better safety precaution such as the glass panels, closed room, CCTV provision, and police or security in the Emergency Department (Ramacciati et al., 2018).

The triggers for violence could arise from the physical properties of the environment where care is provided. A lack of privacy, invasion of personal space through overcrowding, prolonged waiting times, insufficient entertainment during waiting periods, inadequate

seating, excessive noise, offensive odours, poor lighting, heating and ventilation, defective or outdated equipment, poorly maintained amenities and fixtures, and insufficient signage can lead to an increase in tension that results in violent behaviour (International Labour Office et al., 2002).

2.3.1.4 Organizational Domain

In the Qualitative study by Ramacciati et al., (2018) found that the most reported organizational factors that led the violence problem were the disinterest of managers and leader in protecting or paying attention to the episodes of the workplace violence. Healthcare management often underestimated and undervalued the impact of such incidents. Besides, the understaffing also seen as the issues that caused the violent events as the healthcare employee could not deal with the patients within a reasonable time.

2.4 Reporting Behavior

Workplace violence is usually underreported and is often experienced as part of an unspoken culture within emergency department (Alyaemni & Alhudaithi, 2016; Ashton et al., 2018; Banda et al., 2016; Çıkırıklar et al., 2016; Han et al., 2017; Hogarth et al., 2016; Lenaghan et al., 2018).

Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers (2016) suggested that the actual rate of violence in medical occupation is much higher as only it only represents 10.2% of all workplace violence incidents. Meanwhile, Ferri et al.,

(2016) revealed that 84% of health care workers did not report violent events, in accordance with the literature.

Alyaemni & Alhudaithi (2016) found that male nurses reported physical violence more often than their female counterparts while females reported more verbal abuse. Moreover, nurses with a bachelor's degree reported higher rates of verbal and physical violence than nurses with master's or diploma degrees.

Underreporting is problematic because it means the true extent of violent incidents occurring in EDs is unknown. Without adequate data about the number and nature of violent incidents, it remains difficult to develop evidence-based strategies to deal with workplace violence (Taylor & Rew, 2010).

2.4.1 Reason for not Reporting

Most of the violent incidents experienced by workers were tend to be tolerated rather than reported. This culture of acceptance of violence leads to an unwillingness to report incidents of violence perpetrated against health care staff. Such tolerance, in turn, leads ED nurses to feel that incidents of violence are part of their job. This kind of mentality has been noted in other studies investigating low notification rates of WPV (Gillespie, Gates, & Berry, 2013; Pinar & Ucmak, 2011) and supports findings from previous research that nurses often maintain a passive attitude toward workplace violence (Chapman et al., 2013; Hogarth et al., 2016). According to Vogel (2016), the persistent belief that abuse must be tolerated as part of the job is the root of the problem.

There are various reasons why the problem of workplace violence persists. Nurses do not feel supported to report violent incidents and are expected to accept WPV as part of their daily duties (Han et al., 2017). Meanwhile, Alyaemni and Alhudaithi (2016) revealed some of the respondents felt that reporting an incident was useless (47.2%); a few (15%) believed it was not important, and 6 respondents felt too ashamed to report the incident.

The chief nursing executive at the Michael Garron Hospital in Toronto, Irene Andress briefly touched on the organization which mostly like to keep quiet on the incidents that workers are very unwillingly to report the violence in the workplace (Vogel, 2016).

2.5 Demographic and occupational characteristics associated with violence

The aetiology of workplace violence is complex and studies on these topics indicate many risk factors including the association with the demographic and occupational characteristic.

2.5.1 Age

Many researchers found that health care workers with the age of 40 years old and below are the most frequent victims of the violence incidence (Ayranci, 2005), while older workers were significantly experienced less violence compare to the younger workers (Gillespie, Gates, Miller, & Howard, 2010; Hahn et al., 2008; Kitaneh & Hamdan, 2012). A study by Wu, Chai, & Wang (2012) found that the middle age group of 30-45 age were commonly experienced verbal and sexual harassment.

Nevertheless, most of the study found that Age was not significantly related to violence at the workplace (Partridge & Affleck, 2017; Kowalenko et al., 2013; Gates et al., 2011)

2.5.2 Gender

There are quite a number of literature that suggest there are no differences in frequency of violence incidence between male and female (Behnam, Tillotson, Davis, & Hobbs, 2011; Partridge & Affleck, 2017), yet men reported both physical and verbal violence greater than women (Behnam et al., 2011; Çıkriklar et al., 2016).

Researchers reported that male professionals experienced WPV significantly more often than females when they actively intervened, but females were more often the targets of violence (Camerino, Estryn-Behar, Conway, van Der Heijden, & Hasselhorn, 2008; Gillespie et al., 2010).

In Italian general hospitals, Zampieron, Galeazzo, Turra and Buja found that female nurses were the most frequent victims of aggression, whereas in another recent study, Guglielmetti Gilardi, Licarta, and De Lucca highlighted that male health workers had a double risk for being victims of physical violence in comparison to female professionals and the study found no gender difference was evidenced for non-physical violence (as cited in Ferri et al., 2016).

Similarly, Mckenna, Smith, Poole, and Coverdale (2003) found that males tended to more commonly encounter physical assault (29%), verbal abuse (54%) and sexual harassment (9%) than females (16%, 44%, and 6%, respectively). Males tended to experience workplace violence more frequently than females, which accorded with other studies.

2.5.3 Working Experience

Temporary hires, those working for more than 1 year, and those with night shift tended to experience more physical assaults and verbal abuse (Wu et al., 2012). Attending physicians with 5 years experience was more likely than less experienced attending physicians to report experiencing verbal threats very frequently in the past year (Behnam, Tillotson, Davis, & Hobbs, 2011).

2.5.4 Occupation

Workplace violence in the healthcare setting has been documented as a significant problem specifically in the Emergency Department, with nurses are the most vulnerable profession (Ashton et al., 2018; Han et al., 2017; Ramacciati et al., 2018; Talas et al., 2011; Vogel 2016; Wei, Chiou, Chien, & Huang, 2016). An American survey revealed that more than 50% of Emergency Department nurses exposed to some sort of workplace violence in any single week (Kelly, 2014).

In the analysis assessing potential effects of occupational factors on the occurrence of workplace violence, a slightly higher proportion of physical assaults was seen among nurses (22%) than among doctors (19%) (Wu et al., 2012).

The exact prevalence rate of violence against nurses are varies depending on countries and department as the studies adduced data, in UK the prevalence rate were 36% (National Health Service, 2014), 3.9% in US (US Department of Justice, 2011), 29.9% in Ethiopia

(Fute, Mengesha, Wakgari, & Tessema, 2015), and 68.31% in China which is relatively high, even higher than the world average that is 53% [as cited in Zhang et al., 2017]. On average, nurses are three times more at risk than other occupational groups to experience violence in the workplace (Banda et al., 2016).

A study revealed that nurses were approximately 2.26 times more likely than medical staff in the ED to have been physically assaulted, and 7.8 times more likely to have been assaulted than administration staff, whereas medical staff were approximately 2.6 times more likely than nurses to have been verbally abused, while administration staff were much less likely to have been verbally abused (Partridge & Affleck, 2017). Nonetheless, no profession is immune from workplace violence especially in ED (Gates, Ross, & McQueen, 2006; Kowalenko et al., 2013; Wu et al., 2012).

The toll of WPV may be higher for non-physician staff. (Kowalenko et al., 2013). Regardless of numerous study on violence against ED nurses, there are studies that acknowledged other profession such in Talas et al. (2011) reported that the rate of physical assault, verbal abuse or verbal threat highest towards security officers and housekeepers, while Cikriklar et al. (2016) revealed that the prevalence of violence against ED workers are highest among health care officials, EMTs, doctors, and security staff.

2.6 Demographic and Occupational Characteristics Associate with Feeling of Safety, and Confidence when Dealing with Workplace Violence

Gates et al., (2006; 2011) found a weak correlation between the number of assaults and verbal abuse experienced by ED staff and their self-rated feelings of safety, but neither of those studies found any significant differences between doctors and nurses in terms of their feelings of safety, or in the number of assaults they experienced.

On the other hand, Kansagra et al., (2008) found that ED nurses were five times less likely than doctors to say they felt safe even though the frequency of physical assaults experienced by ED staff did not predict perceptions of safety. Only a minority of ED nurses in those studies felt unsafe, but a more recent survey of ED nurses at two Australian hospitals found that 90% had been physically assaulted in the last year, all had been verbally abused, and more than half felt “very” or “moderately” unsafe (Watts et al., 2016).

Interestingly, many of the nurses in that study said that an increased security presence in the ED, or a permanent ED security guard, would help to increase their feelings of safety. Many hospitals in the United States have metal detectors and permanent security guards assigned to the ED, and several US studies have found that positive attitudes towards ED security officers are associated with feelings of safety among ED workers. For example, a researcher found that ED nurses felt safer if they were of the view that the security officers in their hospital were well trained and responded quickly to incidents (Blando, O’Hagan, Casteel, Nocera, & Peek-Asa, 2013). Gates et al., (2006) even found that staff perceptions

of safety were more strongly correlated with positive attitudes towards hospital security than with the actual frequency of assaults experienced, however they did not explore whether this was the case for doctors and nurses and it is not clear how well this extends to other countries.

Partridge and Affleck (2017) found that Medical Officers were around 3.67 times more likely than nurses to “mostly/always” feel safe. Furthermore, staff members who agreed that security officers respond in a timely manner were 3.5 times more likely to feel safe, and those who thought that security officers are a visible presence in the ED were almost 2.1 times more likely to feel safe. Interestingly, having experienced a physical assault in the last six months was not a significant predictor of safety, and nor was having experienced verbal abuse).

Nurses were also significantly less likely than doctors to say they felt safe in the ED. This is concerning for a number of reasons: not only can feeling unsafe contribute to stress, low morale and drive nurses away from their profession (Abraham et al., 2016), but feeling unsafe can impact patient care in the ED (Gates et al., 2011). Reducing occupational violence and ensuring that staff members feel safe and supported afterwards is, therefore, an obligation that hospitals have to their staff and patients (Partridge & Affleck, 2017).

Although females did not experience a higher frequency of physical violence, they felt significantly more unsafe and at risk of injury from violence than males, and felt significantly less confident in their ability to deal with violent patients and visitors. These

differences cannot be attributed to occupation, as there were no significant differences in feelings of safety or confidence by job title. The lack of confidence and lower feelings of safety probably contributed to the fact that females called security significantly more often than males (Gates et al., 2006).

Feeling unsafe much of the time is likely to increase stress and influence a worker's decision whether to remain in a job. The fact that 26% of the nurses in this study never or seldom felt safe (free from violence) while working, and that only 1% always felt safe has important implications for staff retention and patient care (Gates et al., 2006).

2.7 Effects of Workplace Violence towards Healthcare Workers

There are a lot of studies that revealed evidence of the association between exposure to workplace violence and psychological problems (AbuAlRub & Al-Asmar, 2011; Alameddine et al., 2011; Atan et al., 2012; Belayachi, Berrechid, Amlaiky, Zekraoui, & Abouqal, 2010). One of the most frequent psychological consequences of exposure to workplace violence was posttraumatic stress disorder (PTSD).

Gates et al., (2011) mentioned that 5–32% of worker victims of workplace violence met diagnostic criteria for PTSD. Burnout was another psychological consequence that was identified in a few studies (Alameddine et al., 2011). More precisely, levels of emotional exhaustion and depersonalization were significantly higher in workers who experienced workplace violence compared with non-victims. Meanwhile, few studies demonstrated that victims of workplace violence frequently experience anxiety (Atan et al., 2012; Belayachi, Berrechid, Amlaiky, Zekraoui, & Abouqal, 2010; Magnavita & Heponiemi, 2011).

According to Atan et al., (2012) there is an emotional consequence involved after being the victim of the workplace. The five frequent emotion result of workplace violence were anger, sadness, fear, disgust, and surprise. Talas et al., (2011) found profound negative emotions such as hatred, resentment, and animosity while Magnavita & Heponiemi (2011) found that the victim even a desire for revenge.

A study mentioned that victims of workplace violence experienced fear after being attacked in the workplace (Atan et al., 2012). Only one study (Talas et al., 2011) established that a victim of workplace violence might experience disgust when facing a physical assault (69.3%), verbal abuse (61.8%), a verbal threat (68%) or sexual harassment (62.8%).

Hegney, Tuckett, Parker, and Eley (2010) found those who had personal experience of violence reported that morale among colleagues was lower, or deteriorating than those who had not experienced violence. Moreover, a study discovered that verbal violence perceived as bullying behavior from peers influenced worker retention (Wilson, Diedrich, Phelps, & Choi, 2011) as did interview and survey responses from 10 nurse managers working within several healthcare institutions who reported victims of incivility at work resulted in one of three consequences; leaving the organization, transferring to another unit, or avoiding the offender (Ostrofsky, 2012).

2.8 Legislation and guideline in Malaysia

Malaysia protects workers from workplace violence by establishing some rules and regulation. Among them were the Minor Offences Act 1955 (Insulting behaviour), Employment Act 1955, Occupational Safety and Health Act (1994), Industrial Relations Act (1957) and Penal Code Malaysia (Act 574). Applying these laws and regulations, the victims of workplace violence could make a report on any events related to violence at the workplace, and actions shall be taken to the perpetrator of the violence. Moreover, there is some organization that developed a clear policy, procedure and guideline regarding workplace violence. The Department of Occupational Safety and Health (DOSH) in 2001 has published the "Guidance for the prevention of stress and violence at the workplace" as the general guideline. However, due to increasing incidents of violence in the healthcare industry, just recently in 2017, The Ministry of Health Malaysia launched workplace violence guideline specifically for healthcare workers. The guideline emphasized the prevention action as well as the importance of the reporting of violent events.

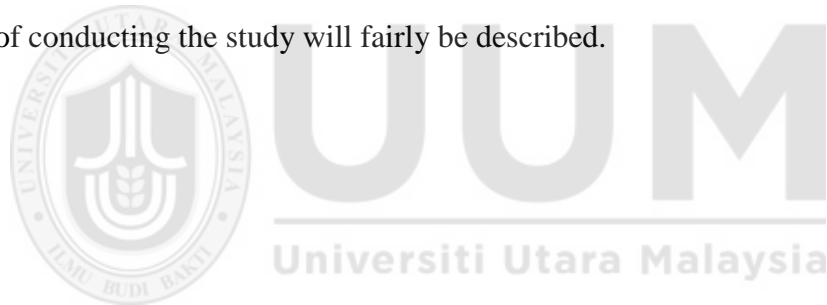
2.9 Gap in the literature

The gap in the literature has been highlighted in this review. Relatively, there is a knowledge gap in which most of the study of workplace violence in healthcare either inside or outside Malaysia were focusing on the Nurses profession instead of all workers in the Emergency Department. Besides that, the lacking of comprehensiveness especially in Malaysia makes it hard for the employees and employers to acknowledge and respond to such workplace violence. Hence, there is a need to conduct more research to further

investigate the issue of workplace violence by focusing on the Emergency Department as a whole by acknowledging all the professions in the department.

Summary

In short, this chapter reviewed and discussed the previous studies done on workplace violence. It defines different types of violence from various studies and the prevalence within other countries. Apart from the relationship between violence and the demographic characteristics, the risk factor, as well as the reporting behaviour towards violence among the exposed workers, also has been discussed. In the next chapter, the research design and method of conducting the study will fairly be described.



CHAPTER 3

METHODOLOGY

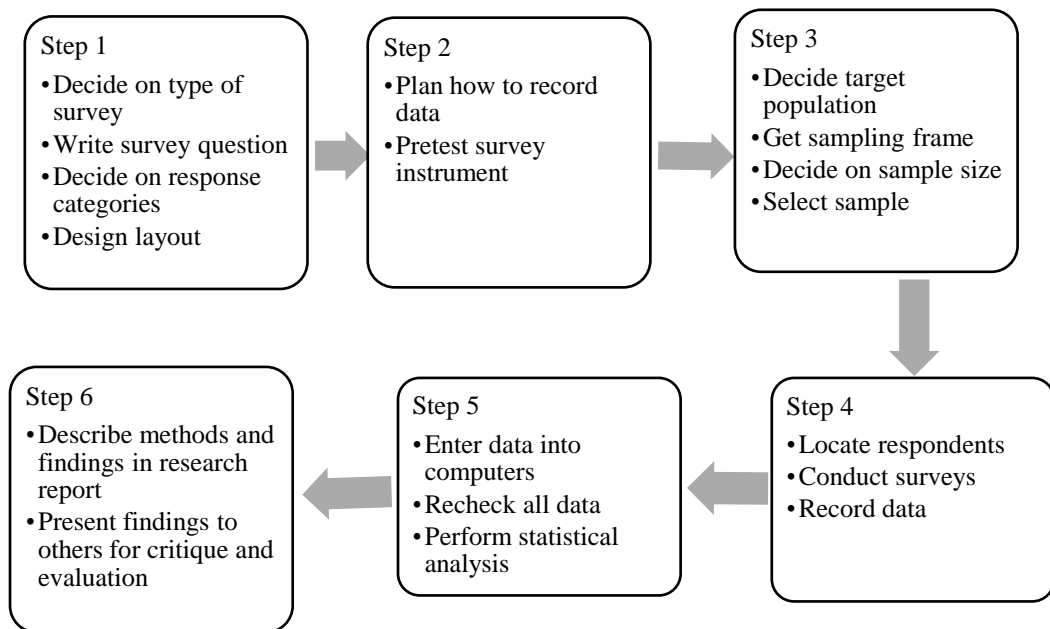
Introduction

This chapter described the research design, population and sample, data collection instruments, sources and proposed procedures for data analysis in order to achieve the previously stated aim and objectives of revealing the frequency of workplace violence against emergency workers in UMMC. The various methods and techniques to be employed for data collection and analysis were mentioned in detail.

3.1 Research methodology flow diagram

Figure 3.1

Research methodology flow diagram



3.2 Research Design

This study adopted the quantitative research design as it enables the researcher to answer the question on the frequency of a phenomenon or the significant to which the phenomenon affects a particular group. Burrell and Gross (2017) asserted that it is the purpose of quantitative research to generate knowledge as well as creating understanding about the social world. Walker (2005) had the same view that the aim of the quantitative research design is to accrue the acquisition and gathering of knowledge while improving the questions for research studies in the future.

Moreover, this quantitative research design allows the researcher to test and identified the relationship between the research constructs. It would answer the underlying questions on the relationship between the variables in aiming to explain, predict and control the events or the situation (Creswell 2013; Gelo, Braakmann & Benetka, 2008).

In particular, it corresponds with the main purpose of this study which to describe the frequency of workplace violence, to identify the contributing factors and the reporting behaviour towards the violence. It will also help in identifying whether demographic and occupational characteristics of ED workers are related to violence or the feelings of safety and level of confidence when dealing with workplace violence.

The unit of analysis for this study is the individual (the workers of the Emergency Department, University Malaya Medical Centre) which has been distributed with the questionnaire for the primary data collection.

In short, the study was a cross-sectional descriptive survey, that data collected at one point in time while descriptive allow data collection without manipulating the study variables or altering the environment. A cross-sectional is convenient, inexpensive, and consuming less time.

3.3 Hypothesis

From the previous studies, it can be assumed that there may have a significant difference in the frequency of workplace violence, feeling of safety, and level of confidence when dealing with violence among ED workers of UMMC, based of demographic and occupational characteristics. The hypotheses developed for this study are as follow:

H1: There is a significant difference in the frequency of workplace violence among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).

H2: There is a significant difference in the feeling of safety among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).

H3: There is a significant difference in the level of confidence when dealing with violence among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).

3.4 Population

Polit & Beck, Rebar & Macnee, and Schneider & Fisher agreed that a research population could be defined as a group of persons (subjects) or unit that have same characteristics which meet the inclusion criteria and which information could be coalesced (as cited by Alshehri, 2017). For this study, the target population was all professions in the Emergency Department of University Malaya Medical Centre whose job involves direct contact with patients and visitors. University Malaya Medical Center was specifically chosen as it is the oldest university hospital in Malaysia and relatively has the highest statistical data of outpatient from Emergency Department compare to other teaching hospitals in the city. The higher numbers of patients increase the risk of ED workers exposure to violence.

There are eight professions in the ED whose job involves in direct contact with patients and visitors were identified including the physician, medical assistant, nurse, pharmacist/pharmacist assistant, radiographer, healthcare assistant, clerk and security guard. Pharmacist and pharmacist assistant were put in the same group as their same job scope in ED. The total population in the hospital is 567 emergency department workers during the time of the study. Table 3.1 displays the total number of the population by occupation in the Emergency Department of UMMC.

Table 3.1
Distribution of professions in the Emergency Department of UMMC

Occupation	Population
Physician	50
Nurse	121
Medical assistant	36
Healthcare assistant	49
Pharmacist/P. assistant	70
Radiographer	82
Clerk	25
Security guard	134
Grand total	567

Source: obtained from Human Resource of UMMC

3.4.1 Inclusion and Exclusion Criteria

Inclusion criteria are a set of predefined characteristics utilized to distinguish subjects who will be included in a research study. Inclusion criteria, together with exclusion criteria, make up the choice or requirement criteria used to decide on the target population for a study. Inclusion criteria ought to respond to the scientific objective of the study and are crucial in order to achieve it (Velasco, 2010).

The following outlines the inclusion criteria:

- I. All Emergency Department workers whose job involved in dealing with patients and visitors.
- II. Emergency Department workers that have a minimum experience of 12 months working in the Emergency Department of UMMC.

The following outline the exclusion criteria:

- I. Emergency Department workers whose job does not involve dealing with patients and visitors.
- II. Emergency Department workers that have experienced less than 12 months working in the Emergency Department of UMMC.

3.5 Sample Size

One of the most important aspects of conducting research is in determining the sample size (Kadam & Bhalerao, 2010). Sample size measures the number of individual samples measured or observations used in a survey or experiment (Zamboni, 2018). This study adapted the Krejcie & Morgan, (1970) sample size determination criteria as it considers the level of confidence and precision to ensure that the sampling size error is dramatically minimized.

Referring to Krejcie and Morgan Table in table 3.2, the suggested sample size for the given population of 567 is approximately 226, thus researcher decided to recruit a minimum number of 226 ED workers as the representative sample to enable a proper statistical analysis.

*Table 3.2
Suggested of sample size according to number population*

Population size (N)	Sample size (S)
500	217
550	226
600	234

Source: obtained from Krejcie & Morgan, (1970) sample size determination criteria

3.5.1 Quota Sampling Technique

In this study, a quota sampling technique was used to select and determine the sample size (226 ED workers) ensuring equal distribution of the different profession in the Emergency Department. Quota sampling is the sampling procedure that makes sure a certain characteristic of a population sample will be represented to the exact extent of investigator desires (Acharya, Prakash, Saxena, & Nigam, 2013). Even though quota sampling method

was sometimes being criticized for the reliability of the sampled results, yet it was generally seen as more reliable compared to other non-probability methods like convenience or snowball sampling (Aprameya, 2016).

Quota sampling is used for the study for the following reasons. Firstly, it improves the representation of different groups (various profession), within the population (Emergency Department workers) by avoiding over-represented of those group. Secondly, it also enables the researcher to compare the groups (i.e physician, nurse, medical assistant etc.) accordingly. Thirdly, given the large population of 646 of Emergency Department workers, quota sampling technique ensures that sampling error is minimized (Dolph, Sheshukov, Chizinski, Vondracek, & Wilson, 2010). Fourthly, quota sampling technique has been used because of the resource constraints of the researchers in terms of time and money (Sekaran & Bougie, 2010; Zikmund, 2012) as well as unavailability of a practical sampling frame (Cooper and Schindler, 2008). The utilization of a quota sampling technique involves a series of steps.

- i. The first step is to divide the population into groups. The appropriate groups in this study are the various professionals in the Emergency Department. Eight groups have been identified including Physician, Medical Assistant, Nurse, Pharmacist/ Pharmacy Assistant, Radiographer, Healthcare Assistant, Clerk, and Security Guards.
- ii. The second step is to calculate the weightages or the quota for each group. It will vary depending on the number of each group within the population. This will be derived when numbers of each group divided by the total population and multiply with the total percentage (i.e. $50 \div 567 \times 100 = 22.12\%$).

- iii. The third step is to select an appropriate sample or quota size from each group. This will be derived when the percentage quota of each group multiply with the sample size needed ($22.12\% \times 226 = 50$).
- iv. Finally, data is gathered until all the quota for each group is reached.

Table 3.3

Quota Sampling Techniques

S/No	Occupation	Population	Percentage (%)	Proportionate Sampling
1	Physician	50	22.12	20
2	Nurse	121	21.34	48
3	Medical assistant	36	6.35	14
4	Healthcare assistant	49	8.64	20
5	Pharmacist/P.assistant	70	12.35	28
6	Radiographer	82	13.93	33
7	Clerk	25	4.41	10
8	Security guard	134	23.63	53
Grand total		567	100	226

For example, the total number of Physician in ED is 50 and this number is divided by total population of 567 and multiplied by the sample size of 226 to get the number of subjects in the sample (i.e. $50 \div 567 \times 226 = 20$).

3.6 Survey

The utilization of surveys for this study was meant to collect descriptive data in the form of questionnaires (Babbie 2016; MacKenna, Hasson & Keeney 2013) [as cited in Alshehri 2017]. The quantitative closed-ended questionnaire was the survey instrument used in this study. The benefit of quantitative surveys is that they allow rapid capture of prima facie of the relevant information. Moreover, it is very convenient for the responded that they could completely answer rather fast without posing an emotional risk to the participants.

3.6.1 Development of the questionnaire

The questionnaire used in the study was adapted from previous literature (Alshehri, 2017 & Kowalenko 2013). The instrument comprises of 28 close-ended items. The questionnaire was modified to fit the study's objective and the context of UMMC organization. The final version of the questionnaire used in this study consist of five sections:

Table 3.4

Development of the questionnaire

Section	No. of Items	Description	Adapted from
Section one: Demographic & occupational information	6	Designed to collect demographic information of the participants such as gender, age, race, education, occupation, and working experience. The demographic data was meant to describe the population and enable the researcher to a drawn comparison.	-
Section two: violence incidence	7	Sought to uncover the proportion of ED workers exposed to different types of violence such as physical violence, verbal abuse, threats, and sexual harassment	Alshehri (2017)
Section three: system & protection	8	Meant to identify systems and means of protection available and procedures for reporting violence events in the emergency department	Alshehri (2017)
Section four: safety scale questions	3	Meant to uncover the feeling of safety of workers during working in the emergency department	Kowalenko et al. (2013)
Section five: confident scale questions	4	Meant to uncover the level of confidence of workers when dealing with WPV in the emergency department	Kowalenko et al. (2013)

3.6.2 Translation

In health and health services, the delivery language is crucial as small differences in conceptual meaning of a particular word may lead to a totally different in the structure of the survey question (Squires et al., 2013).

The questionnaire adapted from Alshehri (2017) was in English which originally translated from Arabic. For this study, the researcher had provided the participants with a bilingual questionnaire including English and Malay version to avoid language barrier as participants would be from the various profession which means various educational level as well.

The method of translation used for the study was the two-way translation to ensure an accurate translation of the questionnaire (Brislin, 1970). Marin and Marin (1991) described this kind of translation process as the most adequate one. Firstly, the English version of the questionnaire was translated into the Malay language by the researcher. Researcher's mother tongue is Malay and she speaks good English. Secondly, the translated questionnaire was then checked by an expert in linguistics. She is a Malay Malaysian and obtained her Bachelor of English Linguistic and Literature (Hons) from International Islamic University Malaysia. Then, the translated questionnaire was translated back into the English language by an independent expert in the health field which worked in the field for more than 10 years. Finally, the researcher compare the original English version of the questionnaire with the back-translated English version for any inconsistencies.

3.6.3 Pretest

A pretest is a small scale study which usually conducted prior to the real study to test for feasibility of the final updated survey (Haber, cited in Alshehri, 2017). It was considered necessary since the questionnaire used in the current study was developed and previously utilized in Saudi Arabia, a different population of different cultures. Pretesting may as well help in identifying a potential problem in the current study (Gilbert, 2001).

Moore, Carter, Nietert, and Stewart (2011) suggested a minimum number of 12 participants for pretest as it is practical for the researcher to conduct an early-stage study within a single centre while still giving valuable preliminary information. A total of 20 emergency department workers with at least two representatives from each profession were involved in the pretest. Both English and Malay version of the questionnaire was used. The participant was asked for any confusing questions and was to comment on the layout, readability and intelligibility of the questions for any improvement (Hallberg, 2008). From the pretest study, the instrument appeared to be reliable and valid as no comment from the participant on the questionnaire. The safety and confidence scale instrument in the previous study by Kowalenko (2013) showed a good face and content validity, as well as reliabilities with Cronbach alpha of 0.75 and 0.95 respectively.

3.7 Data Collection

Data collection is the “precise, systematic gathering of information relevant to the research purpose, or the specific objectives, questions, or hypotheses of a study” (as cited in Alshehri, 2017). The data being collected in this particular study was relevant to the specific objectives formulated in response to the research question.

The data collection process conducted after obtaining the ethics approval from UMMC. The team for data collection consisted of supervisors of each profession in the emergency department. The team member will be given full details by the researcher about the nature and procedure of the study, so they can pass the instruction and information to the participating staff. The ED workers have to agree to participate in the study and consent shall be obtained prior to the completing of the questionnaires. The data were collected within the two month period from November to December 2018. Data collection was done by an electronic approach using Google form for the first month. However, to increase the response rate, the hardcopy of the questionnaire distributed for the next whole month. The data collection sheet distributed throughout the week and has been collected at the end of each week for over a month period. To ensure there is no compulsion in participating and keep the participants anonymous, a closed secure box was placed in the emergency department for the participant to put the returned sheets in.

3.8 Data Analysis Techniques

Data collected through the survey was analyzed with Statistical Package for Social Sciences (SPSS) version 22. According to Gresly, SPSS is a software used to run statistical analysis, manipulate the data and summarize it into tables or graphs (as cited in Alshehri, 2017).

Prior to the analysis, a database in the SPSS program will be created by the researcher. Each of the returned questionnaire sheets will be number-coded and invalid responses shall be excluded, before data cleaning conducted. The data will be checked properly should there any missing value or incorrect data entered. The data screening procedure is important before conducting further analysis as it helps in recognizing the main rules which guide the use of multivariate techniques for data examination (Badara & Saidin, 2014).

This study used descriptive statistical tools to analyze categorical data which included frequency and demographic information while the inferential test was done for the Likert scale questions. This study made use of descriptive analysis in order to gain insight into the details of workplace violence. The first three section that is demographic, violent incidents, and system and means of protection available and the procedure for violence were described using percentage, frequency and means which outcome tabulated or graphed.

Furthermore, the researcher using inferential test of Analysis of variance (ANOVA) to determine the significant difference in frequency of violence, feeling of safety, and level of confidence when dealing with violence among ED workers in UMMC, based on demographic and occupational characteristics for the variable with more than three groups.

For a variable with two groups, sample paired t-test was used to compare the means between the group.

3.9 Ethical Consideration

As research always involves in the major deal of cooperation as well as coordination among the various different party, with different disciplines and institutions, ethical standards provide the values needed for collaborative work including trust, accountability, mutual respect, and fairness (Resnik, 2015). This study complies with the ethical conduct in Malaysia and has been approved by the Medical Research Committee of University Malaya Medical Centre (MREC ID No: 2018511-6287).

Summary

In conclusion, this chapter has explained and discussed the research strategy and method adopted for this research. A descriptive design of cross-sectional survey was used to study the workplace violence against Emergency Department workers in UMMC. A set of questionnaire comprised of five sections was used to collect data from participants. The data collection was done in a two month period between November and December 2018. The software of SPSS version 22 was used for the data analysis. The descriptive statistical tools and inferential tests were used in the analysis process. The results of this study presented in Chapter 4.

CHAPTER 4

RESULTS

Introduction

In this chapter, the results of the analyzed data are presented. The outcome involves descriptive analysis of demographic profile, violence incidence, safety feeling and level of confidence. The inferential analysis includes the differences in violence, safety feeling, as well as the level of confidence when dealing with violence at the workplace.

4.1 Response rate

For the study, the questionnaire was distributed to all ED workers in UMMC that involved in dealing with patients and visitors. The returned questionnaires were checked for the eligibility before conducting the analysis. Out 250 questionnaires distributed, 231 were returned. However, as the study using a proportionate quota sampling method, only 226 eligible questionnaires were selected, while another 5 returned questionnaire were excluded. The response rate (Table 4.1) for the study is 90.4%. Babbie (2016) suggested that response bias can be minimized with a high response rate.

Table 4.1
Response rate

Response	Frequency/Rate
Number of distributed questionnaires	250
Total returned questionnaires	231
Useable and eligible questionnaires	226
Response rate	90.4%

4.2 Descriptive analysis

4.2.1 Participant's demographic information

The demographic characteristics of the respondents (n=226) were analysed as depicted in table 4.2 below. In reference to gender, most of the participants were observed to be female accounted for 53.5% while male was 46.5%. Most of the respondents were Malay accounted for 73% followed by Chinese 11.5%, Indians 11.1%, and other races 4.4%. Majority of the respondents, 45.6% and 40.7% were from 30-39 years old and 20-29 years old of age group, while another 11.5% and 2.2 % were from 40-49 years old and 50+ years old of age group. In regards to working experience, those between 1-5 and 6-10 years of experience account for 27.0% and 46.5% respectively, while those with 11-15 and 16-20 years of work experience account for 16.8% and 7.5% respectively. Additionally, participants with more than 21 years of experience account for only 2.2% of the sampled population.

The respondents with SPM level of education accounted for 36.7% while participants with diploma and bachelor accounted for 42.5% and 14.2% respectively. Meanwhile, 4.4% of respondent were postgraduate and 2.2% were in a group of other education levels. Lastly, in reference to occupation, 8.8% of the sampled population are physicians. Nurses, medical assistance, and healthcare assistants account for 21.2%, 6.2%, and 8.8% respectively. Coherently, pharmacist/pharmacist assistants, radiographers, clerks, and security guards account for 12.4%, 14.6%, 4.4% and 243.5% of the sampled population respectively.

Table 4.2

Summary of participant's demographic information

Variable	Category	n=226	%
Gender	Male	105	46.5
	Female	121	53.5
Race	Malay	165	73.0
	Chinese	26	11.5
	Indian	25	11.1
	Others	10	4.4
Age	20-29 Years old	62	40.7
	30-39 Years old	103	45.6
	40-49 Years old	26	11.5
	50+ Years old	5	2.2
Working experience	1-5 Years	61	27.0
	6-10 Years	105	46.5
	11-15 Years	38	16.8
	16-20 Years	17	7.5
	21+ years	5	2.2
Education	SPM	83	36.7
	Diploma	96	42.5
	Bachelor	32	14.2
	Postgraduate	10	4.4
	Other	5	2.2
Occupation	Physician	20	8.8
	Nurse	48	21.2
	Medical assistant	14	6.2
	Healthcare assistant	20	8.8
	Pharmacist/ P. assistant	28	12.4
	Radiographer	33	14.6
	Clerk	10	4.4
	Security Guard	53	23.5

4.2.2 Frequency by types of violence

The types of violence respondents exposed in ED examined and depicted in Table 4.3 below. In the last 12 month period of study, out of 226 sampled population, 47.3% of the respondents have never exposed to physical violence. However, 19.0% of respondents suggested that they have exposed once while another 15.3 % claimed been 2-3 times exposed to physical violence. Coherently, 8.8% stated that they have been exposed to it for 4-5 times, while another 3.5% exposed for 6 times or more. In reference to verbal abuse, all of the respondents claimed to experienced it at least once (9.3%), in the last 12 month, while another 37.2% exposed to it for 2-3 times. Moreover, 30.1% and 23.5% of the participants indicated that they have experienced verbal abuse violence 4-5 times and 6 times or more respectively in the ED.

In reference to threats, most of the respondent never experienced it (56.2%), while 23.0% reported to experienced it at least once. Meanwhile, 19.0% and 1.8% of the respondents have been exposed to threats 2-3 times and 4-5 times respectively in the emergency department for 12 month period of study time. Lastly, regarding sexual harassment, the majority of the respondent (68.1%) have never been exposed to it while 17.7% of the respondents experienced it once. 11.5% reported to experienced it for 2-3 times, and only 2.7% experienced it for 6 times and more, for the last 12 month period of study time.

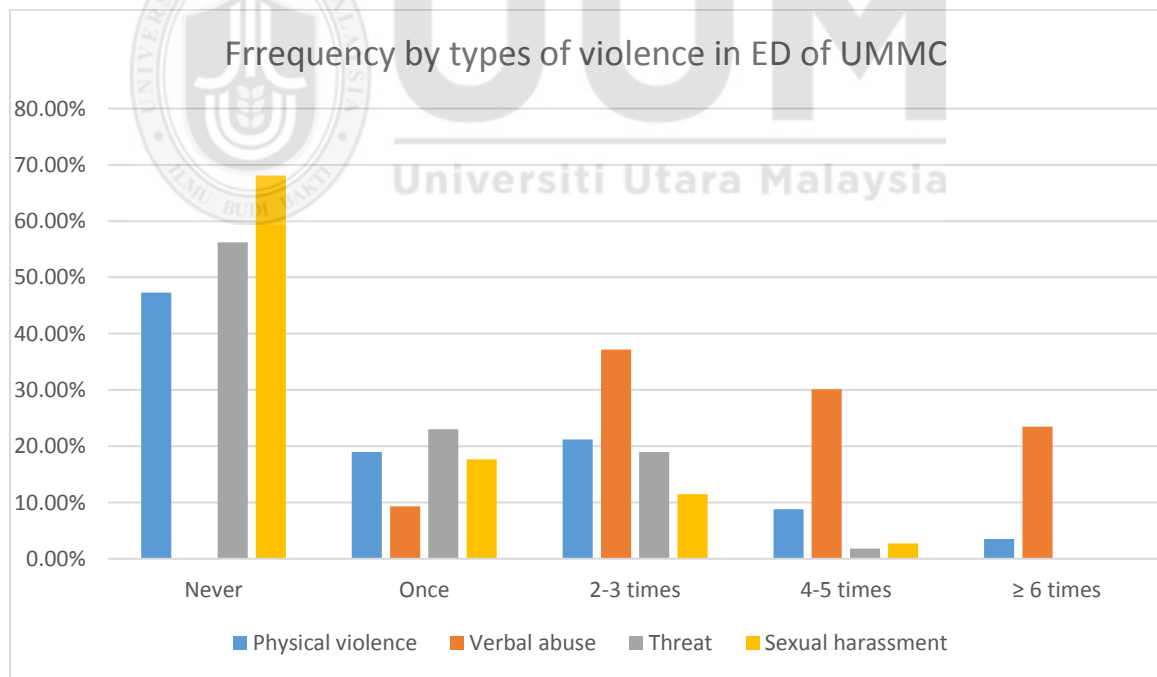
Overall, out of 226 respondent, n=119(53%) has exposed to physical violence, n=226(100%) to verbal abuse, n=99(44%) to threats, and n=72(32%) to sexual harassment. Figure 4.1 show the comparison of frequency by types of violence in the ED of UMMC.

Table 4.3

Frequency by types of violence in the ED of UMMC

Violence	Never		Once		2-3 times		4-5 times		6 times & more		Total n=226(100%)
	n	%	n	%	n	%	n	%	n	%	
Physical Violence	107	47.3	43	19.0	48	21.2	20	8.8	8	3.5	n=119(53%)
Verbal abuse	0	0.0	21	9.3	84	37.1	68	30.1	53	23.5	n=226(100%)
Threats	127	56.2	52	23.0	43	19.0	4	1.8	0	0.0	n=99(44%)
Sexual harassment	154	68.1	40	17.7	26	11.5	6	2.7	0	0	n=72(32%)

Figure 4.1

Comparison of frequency by types of violence in the ED of UMMC

4.2.3 Frequency of violence by demographic and occupational characteristics

The frequency of respondent (n=226) exposed to the violence in the ED of UMMC according to demographic and occupational characteristics examined and depicted in Table 4.4 below. In the last 12 month period of study, female shows higher percentage in physical violence (57.9%), threats (47.9%), and sexual harassment (39.7%) compare to male, while both female and male equally exposed to verbal violence with the percentage of 100%.

Referring to race, Indian shows higher percentage in exposure to physical violence (60%) and sexual harassment (44.0%), while Chinese highest in threats (50%). However, for verbal abuse, all races including Malay, Chinese, Indian and others show an equal percentage of 100%.

Regarding age range, the group of 30-39 years old shows the highest percentage for physical violence (54.4%) and threats (47.1%), while the age group of 20-29 years old were the highest to expose to sexual harassment (38.0%). In the meantime, all age group were 100% exposed to verbal abuse.

From the perspective of working experience, the group range of 6-10 years of experience shows highest exposure to physical violence (62.9%) and threats (47.6%), while the group range of 16-20 years of experience shows the highest exposure to sexual harassment (35.3%). For verbal abuse, all group range shows equal exposure with a percentage of 100%.

In reference to education, Postgraduate and 'other' education level shows the highest exposure to physical violence with both indicate the percentage of 80%, while postgraduate shows highest exposure in threats (70.0%), and 'other' education level were the highest in

sexual harassment (80.0%). All education level were equally exposed to verbal abuse with 100% exposure.

Last but not least, according to occupation, Medical assistant shows the highest percentage for physical violence (100%), while nurses were the most occupation exposed to threat (75%) and sexual harassment (72.9%). However, all occupation in ED of UMMC including Physician, Nurse, Medical assistant, Health care assistant, Pharmacist/Pharmacist assistant, Radiographer, Clerk and Security guard were equally exposed to verbal abuse with 100% exposure.



Table 4.4

The frequency of violence in the ED by demographic characteristics

Occupation	Physical Violence			Verbal abuse		Threats		Sexual Harassment	
	n=226	n=119	%	n=226	%	n=99	%	n=72	%
Gender									
Male	105	49	46.6	105	100.0	41	39.0	24	22.9
Female	121	70	57.9	121	100.0	58	47.9	48	39.7
Race									
Malay	165	86	52.1	165	100.0	71	43.0	52	31.5
Chinese	26	14	53.8	26	100.0	13	50.0	8	30.8
Indian	25	15	60.0	25	100.0	11	44.0	11	44.0
Other	10	4	40.0	10	100.0	4	40	1	10.0
Age									
20-29 Years	92	49	53.3	92	100.0	41	44.6	35	38.0
30-39 Years old	103	56	54.4	103	100.0	47	45.6	31	30.1
40-49 Years old	26	13	50.0	26	100.0	10	38.5	6	23.1
50+ Years old	5	1	20.0	5	100.0	1	20.0	0	0.0
Working experience									
1-5 Years	61	27	44.3	61	100.0	27	44.3	19	31.1
6-10 Years	105	66	62.9	105	100.0	50	47.6	37	35.2
11-15 Years	38	14	36.8	38	100.0	14	36.8	9	23.7
16-20 Years	17	9	52.9	17	100.0	6	35.3	6	35.3
21+ years	5	3	60.0	5	100.0	2	40.0	1	20.0
Education									
SPM	83	32	38.5	83	100.0	33	39.8	15	18.1
Diploma	96	62	64.6	96	100.0	44	49.1	45	46.9
Bachelor	32	13	40.6	32	100.0	12	37.5	3	9.4
Postgraduate	10	8	80.0	10	100.0	7	70.0	5	50.0
Other	5	4	80.0	5	100.0	3	60.0	4	80.0
Occupation									
Physician	20	15	75.0	20	100.0	14	70.0	7	35.0
Nurse	48	42	87.5	48	100.0	36	75.0	35	72.9
Medical assistant	14	14	100.0	14	100.0	9	64.3	8	57.1
Health care assistant	20	16	80.0	20	100.0	11	55.0	12	60.0
Pharmacist/P.assistant	28	5	17.9	28	100.0	3	10.7	5	17.9
Radiographer	33	11	33.3	33	100.0	4	12.1	2	6.1
Clerk	10	2	20.0	10	100.0	3	30.0	0	0.0
Security guard)	53	14	26.4	53	100.0	19	35.8	3	5.7

4.2.4 Perpetrator of Violence in ED

Table 4.5 highlights the result conducted to identify the perpetrators of the violence. This section allowed respondent to give multiple answers, thus total percentage may exceed 100%. As shown from the table, for the physical violence, 42.9% of the respondent claimed that the perpetrator was patients, while 20.8% claimed that it was from visitors.

Regarding verbal abuse, the majority the participants reported that visitors (85%), were perpetrator while 59.7% stated that it was from the patients. In reference to threats, 17.3%, of the participants claimed perpetrated by patients and another 35.8% believed it was from visitors. Lastly, referring to sexual harassment, 22.6% of respondent suggested that patients were the perpetrators, while 19.9% claimed perpetrated by the visitors. Figure 4.2 shows the comparison of the perpetrator by types of violence in the ED of UMMC.

Table 4.5

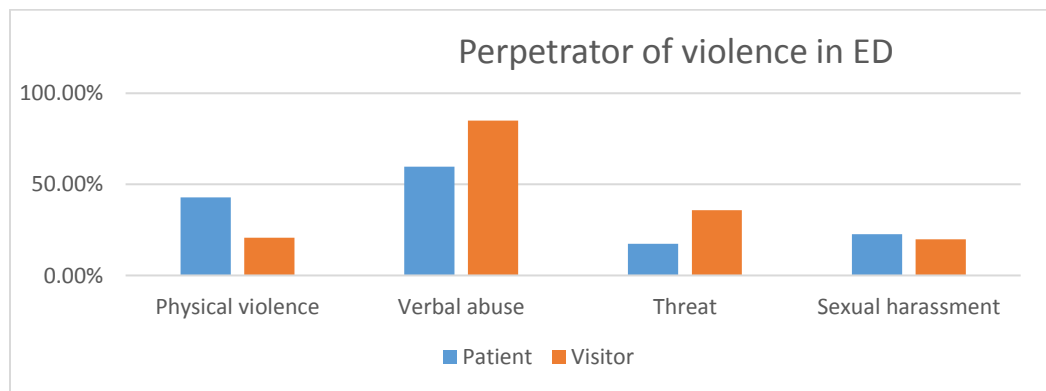
*Perpetrators of violence**

Perpetrator	Patients		Visitors	
	n	%	n	%
Physical Violence	97	42.9	47	20.8
Verbal abuse	135	59.7	192	85.0
Threats	39	17.3	81	35.8
Sexual harassment	51	22.6	45	19.9

* *Multi-selected items, therefore, the sum of percentages may exceed 100%*

Figure 4.2

Comparison of the perpetrator by types of violence in the ED of UMMC



4.2.5 Details of violence incidents

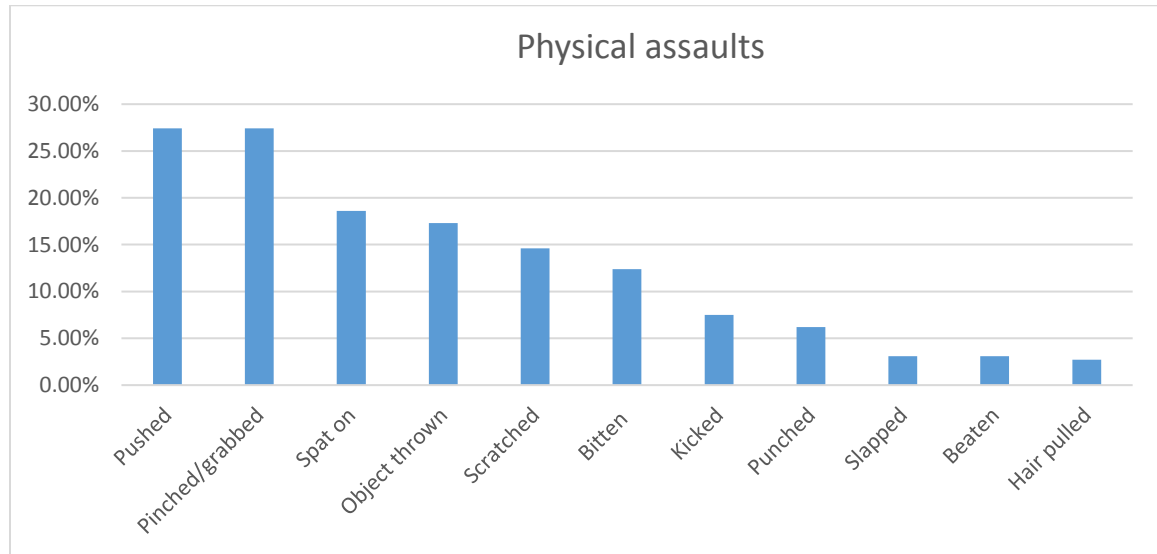
Figure 4.3 and table 4.6 highlighted the details of violence incidents exposed by ED workers. Regarding types of physical assaults (graph 4.3), which a multiple answers question (sum of percentage may exceed 100%), participants reported being punch, pushed, slapped, and kicked with the percentage of 6.2%, 27.4%, 3.1% and 7.5% respectively. Moreover, 12.4%, 27.4%, 14.6% and 3.1% of the respondents claimed respectively being bitten, pinched/grabbed, scratched and beaten. There were participants who have been spat on, hair pulled, and being thrown/hit by an object as a type of physical assault accounted for 18.6%, 2.7%, and 17.3% respectively.

In reference to the time of incident 18.1% of respondent stated that it mostly happens during the morning shift, 35.4% reported it to happen on the afternoon, 38.1% of the respondents stated it was at night while 8.4% of the participants were unsure when most of the incidents happen.

Regarding the place of incident 25.2%, 20.4%, and 28.3 respectively of respondent stated that counter, waiting area and treatment room as where most of the incidents happen while 17.7% and 18.4% claimed the hallway and x-ray room as places where most of the incidents happen. In regards to the treatment received, 6.2 % of the participants stated that they received treatment after exposure to violence while 81.0 % did not. 3.5% of the respondent claimed that they needed treatment but did not receive it while 9.3 % only had self-treatment after the incident.

Figure 4.3

Comparison of percentage and types of physical assault in ED of UMMC*



* Multi-selected items, therefore, the sum of percentages may exceed 100%

Table 4.6

Details of violence incidents

Variable	n=226	%
When the incident happens		
Morning	41	18.1
Afternoon	80	35.4
Night	86	38.1
Unsure	19	8.4
Where did most of the incident happen		
Counter	57	25.2
Waiting Area	46	20.4
Treatment Room	64	28.3
Hallway	40	17.7
X-ray Room	19	18.4
Receiving treatment after the incident		
Yes I received treatment	14	6.2
No. There was no need treatment	183	81
Needed treatment but did not receive it	8	3.5
Self-treatment	21	9.3

4.2.6 Reason for violence incidents

The cause of the violent incidents against ED workers in UMMC as depicted in table 4.7 below let the participant choose multiple answers. The result shows the most common reason was prolonged waiting time for service averaged 0.83 ± 0.38 , followed by the failure of workers to meet the desire of the patient or his companions averaged 0.49 ± 0.50 and impact of disease or pain with the average of 0.46 ± 0.50 . An average of 0.35 ± 0.48 indicated with the influence of alcohol or drugs, while 0.31 ± 0.46 indicated with mental health psychiatric patient. Other factors were way of dealing with the patient by staff, unavailability of medications or needed service for the patient, fear/ stress, and lack of tools to prevent the attack on the worker with the average of 0.28 ± 0.45 , 0.13 ± 0.34 , 0.22 ± 0.41 , and 0.14 ± 0.35 respectively. However, there were participants that have no idea on the cause of the incidents averaged 0.04 ± 0.20 , while the average of 0.02 ± 0.15 gave other reason.

Table 4.7

The reason for violence in the ED of UMMC

The cause of most incidents*	mean	SD
Waiting for receiving service	0.83	0.38
Failure to meet the desire of the patient or his companions	0.49	0.50
Mental health/Psychiatric patient	0.31	0.46
The way of dealing with the patient by the staff	0.28	0.45
Unavailability of medications or needed service for patient	0.13	0.34
Fear/stress	0.22	0.41
Lack of tools to prevent the attack on worker	0.14	0.35
Impact of disease/pain	0.46	0.50
Influence of alcohol /drugs	0.35	0.48
Do not know the reason	0.04	0.20
Other reason	0.02	0.15

*Multi-selected items

4.2.7 System and means of protection available and the procedure for violence

Table 4.8 details the responses of the participant (n=226) in regards to the statement relating to the system and means of protection available and the procedure for violence. From the table, the majority of the participant (48.7%) believed that there are enough methods to prevent violence on staff, 32.3% stated there are not enough methods while 19.0% respondent do not know if there is any method to prevent violence in the department.

Regarding policies, 39.4% of the participants agree that there are enough policies, systems, and instructions to prevent violence on workers in hospitals, 26.5% of the respondents did not agree while 34.1% of the participant claim they do not know.

When being asked about the reporting procedure, most of the respondent (55.8%) believed that there are reporting a procedure for reporting violence in the hospital, while 17.3% believed there is no such procedure, whereas and 27.0% of respondent claimed they do not know.

In regards to training or educational programs, more than half of respondent (63.7%) reported that they have not received training or educational programs by the hospital to prevent and deal with violence. Only 27.4% of the respondent stated that they have received training or educational programs while 8.8% of the respondents did not aware at all. In relation to reporting behaviour, 8.0% of respondent mentioned that they did write a report to the administrator for physical violence against them while the vast majority of them by 92.0% did not. Continually, 7.1% of respondent mentioned that action has been taken on the assaulter, while 85.4% claimed no action taken towards the perpetrator, and 7.5% did not aware of that. Finally, when being asked on likelihood to stop working in

ED, only 0.4% of the respondent stated that it is very likely, while 13.3% feel it is very unlikely for them to stop working in ED because of exposure to violence. 17.7% of the respondent indicate likely, 34.5% indicate unlikely, whereas 31.1% of workers have not decided yet regarding the matte

Table 4.8

System and means of protection available and the procedure for violence

Variable	Category	n=226	%
Methods used to prevent violence			
	Yes	110	48.7
	No	73.	32.3
	Do not know	43	19.0
Policies, systems, instructions preventing violence			
	Yes	89	39.4
	No	60	26.5
	Do not know	77	34.1
Procedure for reporting			
	Yes	126	55.8
	No	39	17.3
	Do not know	61	27.0
Received training, education program			
	Yes	62	27.4
	No	144	63.7
	Do not know	20	8.8
Written report to the administrator			
	Yes	18	8.0
	No	208	92.0
Action against attacker			
	Yes	16	7.1
	No	193	85.4
	Do not know	17	7.5
Stopping working in ED			
	Very likely	1	0.4
	Likely	40	17.7
	Not decided yet	77	34.1
	Unlikely	78	34.5
	Very unlikely	30	13.3

4.2.8 Reason for not reporting

Regarding the reason for not reporting (Table 4.9), which respondent may give multiple answers, the majority of the respondent, averaged 0.79 ± 0.41 indicate that there was no benefit in reporting the violence as there will be no follow up against the assaulter, thus they did not report the violence. The second common reason for not reporting violence was because of workers think the incident was not important averaged 0.73 ± 0.45 . Other reasons were fear on consequences on oneself and their work averaged 0.34 ± 0.47 , feeling ashamed of the incident averaged 0.22 ± 0.41 and do not know whom to report to with the average of 0.11 ± 0.31 . Additionally, there were respondents who gave other reason for not reporting the violence incident averaged 0.04 ± 0.20 .

Table 4.9

Reason for not reporting violence

Why the incident was not reported *	mean	SD
Incident was not important	0.73	0.45
Fear of consequences on oneself or their work	0.34	0.47
Feeling ashamed of the incident	0.22	0.41
Do not know whom to report	0.11	0.31
No benefit in writing	0.79	0.41
Other reason	0.04	0.20

**Multi-selected items*

4.2.9 Safety scale

The construct safety scale from respondents (n=226) was analysed descriptively where the overall average attained is 5.30 ± 1.32 implying the feeling of safety is average as depicted in table 4.10 below. In regards to the statement “I feel safe (free from violence) when working in the Emergency Department”, respondent has responded with an average of 6.16 ± 1.42 , which is above the overall average. An average of 4.78 ± 1.39 response was attained from the statement “I think there is a good chance of being injured from an assault by a patient while working in the ED during the next 6 months”. In reference to statement “I think there is a good chance of being injured from an assault by a visitor while working in the ED during the next 6 months”, participants gave an average response of 4.96 ± 1.14 indicating their feeling of safety.

Table 4.10

Safety scale

No	Safety Scale	Mean	SD
SS1	I feel safe (free from violence) when working in the Emergency Department	6.16	1.42
SS2	I think there is a good chance of being injured from an assault by a patient while working in the ED during the next 6 months.	4.78	1.39
SS3	I think there is a good chance of being injured from an assault by a visitor while working in the ED during the next 6 months	4.96	1.14
Overall mean Safety		5.30	1.32

4.2.10 Confidence scale

The construct confidence scale from respondents (n=226), has been analysed descriptively as depicted in table 4.11 below. The overall average attained was 5.49 ± 1.29 , implies the level of confidence of the participants when dealing with workplace violence. The statement “Your ability to manage patients/visitors who become physically violent towards you or your co-workers” attained an average of 5.88 ± 1.47 . Respondents gave a slightly higher response in relation to the statement “your ability to manage patients/visitors who become verbally abusive to you or your co-workers” by averaged 6.00 ± 1.47 . The confidence scale of the statement “your ability to manage patients/visitors who threatening you or your co-workers” attained an average of 5.04 ± 1.07 from the respondents. Finally, the statement “your ability to manage patients/visitors who become sexually harassing towards you or your co-workers” attained an average of 5.05 ± 1.13 .

Table 4.11

Confident scale

No	Confidence scale	Mean	SD
CS1	Your ability to manage patients/visitors who become physically violent towards you or your coworkers?	5.88	1.47
CS2	Your ability to manage patients/visitors who become verbally abusive to you or your coworkers?	6.00	1.47
CS3	Your ability to manage patients/visitors who threatening you or your coworkers?	5.04	1.07
CS4	Your ability to manage patients/visitors who become sexually harassing towards you or your coworkers?	5.05	1.13
Overall mean Safety (SC2, SC3, SC4 recode)		5.49	1.29

4.3 Inferential analysis

4.3.1 Differences in violence based on demographic and occupational characteristics

An independent t-test for two groups of variable and one way ANOVA for more than two groups of the variable has been computed to determine the differences of violence frequency based on demographic characteristics (Table 4.12). Violence indicated by combination means of four types of violence (physical violence, verbal abuse, threats and sexual harassment). The demographic variables used in this analysis including gender, age, race, education, experience, and occupation. The findings demonstrated violence did not differ based on gender [$df_{224}, t=2.246, p>0.05$], age [$df_{3,222}=0.501, p=0.682$], race [$df_{3,222}=0.705, p=0.550$], and experience [$df_{4,221}=1.152, p=0.333$]. However, it was reported that there is a significant difference in violence based on education [$df_{4,221}=2.993, p=0.20$] and occupation [$df_{7,218}=22.417, p=0.000$].

When referring to the Post Hoc test (Table 4.13), which shows differences within groups, the result only displays the differences between occupation. The frequency of violence differ by occupation between Physician (2.44 ± 0.64) and Radiographer (1.79 ± 0.38), Pharmacist/Pharmacist assistant (1.61 ± 0.44) as well as Security guard (1.91 ± 0.64), between Nurse (2.72 ± 0.58) and Radiographer (1.79 ± 0.38), Pharmacist/Pharmacist assistant (1.61 ± 0.44), Clerk (2.10 ± 0.39), as well as security guard (1.91 ± 0.64), between Medical assistant (2.70 ± 0.67) and Radiographer (1.79 ± 0.38), Pharmacist/Pharmacist assistant (1.61 ± 0.44), as well as security guard (1.91 ± 0.64), between Health care assistant (2.39 ± 0.58) and Pharmacist/Pharmacist assistant (1.61 ± 0.44), Radiographer (1.79 ± 0.38), as well as Security guard (1.91 ± 0.64).

Table 4.12

Differences in frequency of violence based on demographic and occupational characteristics.

Variable	Test	N	mean	SD	DF	F	t	sig
Gender	T test							
Male		105	2.14	0.65	DF=224	none	2.246	.500
Female		121	2.20	0.63				
Age	One Way ANOVA							
20-29 Years old		92	2.15	0.62				
30-39 Years old		103	2.22	0.71	DF=3,222	.501		.682
40-49 Years old		26	2.10	0.40				
50+ Years old		5	2.00	0.42				
Race	One Way ANOVA							
Malay		165	2.16	0.64	DF=3,222	.705		.550
Chinese		26	2.16	0.71				
Indian		26	2.33	0.58				
Other		10	2.02	0.64				
Education	One Way ANOVA							
SPM		83	2.05	0.48				
Diploma		96	2.30	0.73	DF=4,221	2.993		.020*
Bachelor		32	2.02	0.70				
Postgraduate		10	2.33	0.41				
Others		5	2.60	0.58				
Experience	One Way ANOVA							
1-5 years		61	2.05	0.56				
6-10 years		105	2.24	0.66	DF=4,221	1.152		.333
11-15 years		38	2.13	0.71				
16-20 years		17	2.26	0.63				
21+ years		5	2.40	0.60				
Occupation	One Way ANOVA							
Physician		20	2.44	0.64				
Nurse		48	2.72	0.58				
Medical assistant		14	2.70	0.67				
Health care assistant		20	2.39	0.58	DF=7,218	22.417		.000*
Pharmacist/P .assistant		28	1.61	0.44				
Radiographer		33	1.79	0.38				
Clerk		10	2.10	0.39				
Security guard		53	1.91	0.64				

Table 4.13

Post Hoc Test for difference in violence based on occupation

(I) Occupation	(J) Occupation	Mean difference (I-J)	SE	Sig*
Physician	Pharmacist/P.assistant	0.83	0.14	0.000
	Radiographer	0.65	0.14	0.000
	Security Guard	0.53	0.13	0.002
Nurse	Pharmacist/P.assistant	1.12	0.12	0.000
	Radiographer	0.94	0.11	0.000
	Clerk	0.62	0.17	0.008
	Security Guard	0.81	0.10	0.000
Medical assistant	Pharmacist/P.assistant	1.09	0.16	0.000
	Radiographer	0.90	0.16	0.000
	Security Guard	0.79	0.15	0.000
Healthcare assistant	Pharmacist/P.assistant	0.78	0.14	0.000
	Radiographer	0.60	0.14	0.001
	Security Guard	0.18	0.13	0.007
Pharmacist/P.assistant	Physician	-0.83	0.14	0.000
	Nurse	-1.12	0.12	0.000
	Medical assistant	-1.09	0.16	0.000
	Healthcare assistant	-0.78	0.14	0.000
Radiographer	Physician	-0.65	0.14	0.000
	Nurse	-0.94	0.11	0.000
	Medical assistant	-0.91	0.16	0.000
	Healthcare assistant	-0.60	0.14	0.001
Clerk	Nurse	-0.62	0.17	0.008
Security Guard	Physician	-0.53	0.13	0.002
	Nurse	-0.81	0.98	0.000
	Medical assistant	-0.79	0.15	0.000
	Healthcare assistant	-0.48	0.13	0.007

*The mean difference is significant at the 0.05 level

4.3.2 Differences in the feeling of safety based on demographic and occupational characteristics

The one way ANOVA and the independent t test techniques have been conducted to examine the difference in feeling of safety based on demographic (Table 4.14). The result illustrate that feeling of safety does not differ based on gender [$df=224$, $t=-1.275$, $p>0.05$], age [$df_{3,222}=2.21$, $p=0.882$], race [$df_{3,222}=2.44$, $p=0.065$], and education [$df_{4,221}=1.453$, $p=0.218$]. However, feeling of safety is significant differ based on experience [$df_{4,221}=5.860$, $p=0.000$], and occupation [$df_{7,218}=7.818$, $p=0.000$].

Based on Post Hoc comparison (Table 4.15), there were differences in the feeling of safety based on working experience which lies between 1-5 years (5.64 ± 0.67) of experience and 6-5 years (5.21 ± 0.83), 11-15 years (5.10 ± 0.58), as well as 16-20 years (5.02 ± 0.63).

Based on occupation (Table 4.16), the differences lies between Health care assistant (5.77 ± 0.62) and Pharmacist/Pharmacist assistant (4.99 ± 0.48), as well as Radiographer (5.15 ± 0.58), and also between Clerk (4.13 ± 0.28) and all other profession including Physician (5.47 ± 0.72), Nurse (5.26 ± 0.92), Pharmacist/Pharmacist assistant (4.99 ± 0.48), Medical assistant (5.43 ± 0.59), Radiographer (5.15 ± 0.58), as well as Security guard (5.58 ± 0.71).

Table 4.14

Differences in the feeling of safety based on demographic and occupational characteristics

Variable	Test	N	mean	SD	DF	F	t	sig
Gender	T-test							
Male		105	5.38	0.73	DF=224	none	1.275	.204
Female		121	5.25	0.79				
Age	One Way ANOVA							
20-29 Years old		92	5.34	0.79				
30-39 Years old		103	5.30	0.77	DF=3,222	.221		.882
40-49 Years old		26	5.22	0.72				
50+ Years old		5	5.20	0.61				
Race	One Way ANOVA							
Malay		165	5.26	0.78	DF=3,222	2.446		.065
Chinese		26	5.19	0.76				
Indian		26	5.66	0.74				
Other		10	5.53	0.76				
Education	One Way ANOVA							
SPM		83	5.45	0.81				
Diploma		96	5.22	0.76	DF=4,221	1.453		.218
Bachelor		32	5.24	0.69				
Postgraduate		10	5.40	0.66				
Others		5	4.93	0.43				
Experience	One Way ANOVA							
1-5 years		61	5.64	0.67				
6-10 years		105	5.21	0.83	DF=4,221	5.860		.000*
11-15 years		38	5.10	0.58				
16-20 years		17	5.02	0.63				
21+ years		5	5.87	0.61				
Occupation	One Way ANOVA							
Physician		20	5.47	0.72				
Nurse		48	5.26	0.92				
Medical assistant		14	5.43	0.59				
Health care assistant		20	5.77	0.62	DF=7,218	7.818		.000*
Pharmacist/P .assistant		28	4.99	0.48				
Radiographer		33	5.15	0.58				
Clerk		10	4.13	0.28				
Security guard		53	5.58	0.71				

Table 4.15

Post Hoc Test for difference in the feeling of safety based on working experience

(I) Work Experience	(J) Work Experience	Mean difference (I-J)	SE	Sig*
1-5 years	6-10 years	0.44	0.12	0.003
	11-15 years	0.55	0.15	0.003
	16-20 years	0.63	0.20	0.018
6-10 years	1-5 years	-0.44	0.12	0.003
11-15 years	1-5 years	-0.55	0.15	0.003
16-20 years	1-5 years	-0.63	0.20	0.018

**The mean difference is significant at the 0.05 level*

Table 4.16

Post Hoc Test for difference in the feeling of safety based on occupation

(I) Occupation	(J) Occupation	Mean difference (I-J)	SE	Sig*
Physician	Clerk	1.33	0.27	0.000
Nurse	Clerk	1.12	0.24	0.000
Medical assistant	Clerk	1.30	0.29	0.000
Healthcare assistant	Pharmacist/P.assistant	0.78	0.20	0.004
	Radiographer	0.62	0.20	0.041
	Clerk	1.63	0.27	0.000
Pharmacist/P.assistant	Healthcare assistant	-0.78	0.20	0.004
	Clerk	0.85	0.26	0.022
	Security Guard	-1.59	0.16	0.008
Radiographer	Healthcare assistant	-0.62	0.20	0.041
	Clerk	1.02	0.25	0.002
Clerk	Physician	-1.33	0.27	0.000
	Nurse	-1.12	0.24	0.000
	Medical assistant	-1.30	0.29	0.000
	Healthcare assistant	-1.63	0.26	0.000
	Pharmacist/P.assistant	-0.85	0.26	0.022
	Radiographer	-1.02	0.25	0.002
	Security Guard	-1.45	0.24	0.000
Security Guard	Pharmacist/P.assistant	0.59	0.16	0.008
	Clerk	1.45	0.24	0.000

**The mean difference is significant at the 0.05 level*

4.3.3 Differences in level of confidence based on demographic and occupational characteristics

The one way ANOVA and the independent sample t-test techniques have been performed to examine the difference in feeling of confidence based on demographic (Table 4.17). The result illustrate that feeling of confident does not differ based on age [$df_{3,222}=1.513$, $p=0.212$] and race [$df_{3,222}=1.962$, $p=0.126$]. In contrast, gender [$t=3.809$, $p<0.05$], education [$df_{4,221}=3.390$, $p=0.010$], experience [$df_{4,221}=2.439$, $p=0.048$] and occupation ($df_{7,218}=17.588$, $p=0.000$) does shows significant difference in feeling of confident.

When referring to the Post Hoc test (Table 4.18), which shows differences within groups, the result only displays the differences between occupation. The difference in level of confidence by occupation, lies between Physician (5.93 ± 0.49) and Nurse (4.96 ± 0.67), Health care assistant (4.78 ± 0.66), as well as Radiographer (5.34 ± 0.64), between Nurse (4.96 ± 0.67) and Medical assistant (5.91 ± 0.62), Pharmacist/Pharmacist assistant (5.71 ± 0.74), as well as Security guard (6.05 ± 0.67), between Health care assistant (4.78 ± 0.66) and Pharmacist/Pharmacist assistant (5.71 ± 0.74), Radiographer (5.34 ± 0.64), as well as Security guard (6.05 ± 0.67), between Radiographer (5.34 ± 0.64) and Security guard (6.05 ± 0.67), and lastly between Clerk (4.93 ± 0.35) and Medical assistant (5.91 ± 0.62), Pharmacist/Pharmacist assistant (5.71 ± 0.74), as well as Security guard (6.05 ± 0.67).

Table 4.17

Differences in the feeling of confident based on demographic and occupational characteristics

Variable	Test	N	mean	SD	DF	F	t	sig
Gender								
Male	T-test	105	5.62	0.81	DF=224	none	2.246	.026*
Female		121	5.38	0.77				
Age								
20-29 Years old	One Way ANOVA	92	5.39	0.75	DF=3,222	1.513		.212
30-39 Years old		103	5.51	0.83				
40-49 Years old		26	5.76	0.82				
50+ Years old		5	5.45	0.67				
Race								
Malay		165	5.45	0.81	DF=3,222	1.926		.126
Chinese		26	5.46	0.73				
Indian		26	5.62	0.82				
Other		10	6.03	0.56				
Education								
SPM		83	5.61	0.87	DF=4,221	3.390	None	.010*
Diploma		96	5.32	0.79				
Bachelor		32	5.71	0.60				
Postgraduate		10	5.80	0.35				
Others		5	4.90	0.45				
Experience								
1-5		61	5.57	0.79	DF=4,221	2.439		.048*
6-10		105	5.36	0.79				
11-15		38	5.66	0.72				
16-20		17	5.81	0.93				
20+		5	5.05	0.67				
Occupation								
Physician		20	5.93	0.49	DF=7,218	17.588		.000*
Nurse		48	4.96	0.67				
Medical assistant		14	5.91	0.62				
Health care assistant		20	4.78	0.66				
Pharmacist/P .assistant		28	5.71	0.74				
Radiographer		33	5.34	0.64				
Clerk		10	4.93	0.35				
Security guard		53	6.05	0.67				

Table 4.18

Post Hoc Test for difference in the level of confidence based on occupation

(I) Occupation	(J) Occupation	Mean difference (I-J)	SE	Sig*
Physician	Nurse	0.96	0.17	0.000
	Healthcare assistant	1.15	0.20	0.000
	Radiographer	0.58	0.18	0.040
	Clerk	1.00	0.25	0.002
Nurse	Physician	-0.96	0.17	0.000
	Medical assistant	-0.95	0.20	0.000
	Pharmacist/P.assistant	-0.74	0.15	0.000
	Security Guard	-1.09	0.13	0.000
Medical assistant	Nurse	0.95	0.20	0.000
	Healthcare assistant	1.14	0.23	0.000
	Clerk	0.99	0.27	0.007
Healthcare assistant	Physician	-1.15	0.20	0.000
	Medical assistant	-1.14	0.23	0.000
	Pharmacist/P.assistant	-0.93	0.19	0.000
	Radiographer	-0.57	0.18	0.042
	Security Guard	-1.28	0.17	0.000
Pharmacist/P.assistant	Nurse	0.74	0.15	0.000
	Healthcare assistant	0.93	0.19	0.000
	Medical assistant	-1.09	0.16	0.000
	Clerk	0.78	0.24	0.027
Radiographer	Physician	-0.57	0.18	0.040
	Healthcare assistant	-0.57	0.18	0.042
	Security Guard	-0.70	0.14	0.000
Clerk	Physician	-1.00	0.25	0.002
	Medical assistant	-0.99	0.27	0.007
	Pharmacist/P.assistant	-0.78	0.24	0.027
	Security Guard	-1.13	0.22	0.000
Security Guard	Nurse	1.09	0.13	0.000
	Healthcare assistant	1.28	0.17	0.000
	Radiographer	0.70	0.14	0.000
	Clerk	1.13	0.22	0.000

**The mean difference is significant at the 0.05 level*

4.4 Summary of hypothesis

The summary of hypothesis for objective 3 until objective 5 which to identify any significant difference in frequency of violence, feeling of safety, and level of confidence when dealing with workplace violence among ED workers in UMMC depicted in the Table 4.19 below.

Table 4.19

Summary of the hypothesis

Hypothesis statement	Outcome
H1: There is a significant difference in the frequency of workplace violence among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).	The hypothesis is partially supported. There is only significant difference in the frequency of workplace violence among ED workers in UMMC when based on education and occupation.
H2: There is a significant difference in the feeling of safety among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).	The hypothesis is partially supported. There is only significant difference in the frequency of workplace violence among ED workers in UMMC when based on working experience and occupation.
H3: There is a significant difference in the level of confidence when dealing with violence among ED workers in UMMC, based on demographic and occupational characteristics (gender, age, race, working experience, education and occupation).	The hypothesis is partially supported. There is only significant difference in the frequency of workplace violence among ED workers in UMMC when based on gender, working experience, education and occupation.

Summary

This chapter had provided the details of the outcome of the study which to describe workplace violence in UMMC. The tabulated results summarized the result of the descriptive and inferential analysis. The result answers the objective of the study indicated there was difference in frequency of violence, feeling of safety and confidence level when dealing with violence, based on demographic and occupational characteristics.

CHAPTER 5

DISCUSSION

Introduction

This chapter summarizes and discusses the outcomes of the study aimed at describing workplace violence against Emergency Department workers in University Malaya Medical Centre. Furthermore, the overall benefit of the study, limitations as well as future research are also discussed. The report ends with the recommendation and conclusion of the study.

5.1 Summary of the study results

The goal of this study is to describe the frequency of workplace violence against Emergency Department workers in UMMC, to identify the contributing factors and the reporting behaviour towards the workplace violence, as well as to identify if there is any difference in frequency of violence, feeling of safety, and level of confidence when dealing with workplace violence among ED workers in UMMC based on demographic and occupational characteristic. Generally, workplace violence against ED workers in UMMC was frequent and the most common contributing factors were prolong waiting time for service and failure to meet the desire of patients and visitors. Majority of the ED workers in UMMC did not report the violence for the reason of no benefit in reporting as no action will be taken against assaulter, or because the thought of the incident was not important. There were only statistically significant difference in frequency of workplace violence among ED workers of UMMC, when based on education and occupation, while in feeling

of safety, there were statistically significant difference based on working experience and occupation, and lastly, there were only statistically significant difference in level of confidence when dealing with violence among ED workers of UMMC, when based on gender, working experience, education and occupation.

5.2 Summary of demographic

The response rate (90.4%) of this study represent satisfactory outcome which higher than the other study in Malaysia setting (Ng & Othman, 2002; Ali, Zakaria, Mohd Zahari, Mohd Said, & Salleh, 2015), and slightly lower to the other similar study by Ruth et al. (2009).

The study was participated by 46.5% male and 53% female respondent which give quite balance in gender distribution. The profession of nurse largely contributes to female distribution while security guard mostly contributes to the male respondent. The other six professions were the physician, medical assistant, health care assistant, pharmacist/pharmacist assistant, radiographer, and clerk. The high percentage from the security guard, radiographer, pharmacist/pharmacist assistant, is because these profession working at ED by rotation basis, while profession like the nurse, physician, healthcare assistant, medical assistant and clerk are permanently working in ED without rotation to other departments. The rotational basis profession included as these professions also required to be in the ED all the time for the organization to operate effectively. It was observed in the previous study that even other professionals experienced workplace violence in ED, other than nurse and physician (Ferri et al., 2016; Hamdan & Hamra, 2015). The age range of the respondent was mostly within 30-39 years old (45.6%) which parallel

to the 46.5% of the respondent with 6-10 years of working experience. Majority of the participants were Malay as the dominant race in Malaysia.

5.3 Workplace violence

The study were focusing on the most common perpetrators in violence in ED that is second types of perpetrator in which violence perpetrated by the patients or patient's relatives or visitors with patients as the leading in most previous studies (AlBashtawy & Aljezawi, 2016; Alyaemni & Alhudaithi, 2016; Banda et al., 2016; Çıkırlar et al., 2016; Talas et al., 2011).

Interestingly, in this study, respondents reported being perpetrated mostly by patients for the physical violence and sexual harassment, while it was the opposite for verbal abuse and threat which mostly perpetrated by visitors. This could be because of the longer period of time workers had spent for patients that gave rise to the physical violence and sexual harassment exposure compares to the visitors, which only had minimal contact with the ED workers. In regards to verbal abuse and threats from visitors, as according to Alyaemni & Alhudaithi (2016), the highly intense atmosphere of the critical medical situation leads to fear, frustration or anger that accelerate to the verbal reaction of the patient's relatives or visitors that not necessary to be in an appropriate way.

The most common type of physical assaults reported was being pushed and pinched/grabbed with both showing 27.4% of exposure, and being spat on (18.6%) as well as being

scratched (14.6%). All these physical violence are most likely being perpetrated by the patient in such a restless condition.

Consistent with other previous studies (Alshehri, 2017; Esmaeilpour, Salsali & Ahmadi 2011; Kitaneh & Hamdan 2012). The findings of this study reported most of the violence incidence to happen during the night shift. This might be because of the nature that after office hour, or at night, people are expecting to have a good rest after the long tiresome day, yet for some reason need to be in the ED, that simple mistakes or dissatisfaction easily escalate to violent behaviour. Moreover, during the night shift, it is expected to have a shortage of hospital staff, while ED being the centre for outpatients and visitors as ED is the only choice despite the non-emergency medical condition.

The place where the violence events took place was mostly in the treatment room, in accordance with other studies (Ferri et al., 2016). This may probably because of the proximity of the healthcare workers to the patients which increase the risk of violence events.

Out of all workers exposed, regardless of the types of violence, only 6.2% reported receiving treatment after the incidence. The low percentage shows maybe because of the high number of exposure to non-physical violence which most workers don't feel the need to seek treatment unless they are physically, or severely injured by the perpetrators

5.3.1 Frequency of workplace violence

The total number of Emergency Department workers in UMMC at the time of the study was 567 and out of this 226 (40%) reported experienced at least one episode of violence, be it physical assault, verbal abuse, threat, or sexual harassment, in 12 months of the study period. Therefore, in a month an average of 18.8 (3.3%) ED workers had experienced workplace violence. Comparing this figure to a similar study by Ruth et al. (2009) in UKMMC, Malaysia, UMMC shows a higher percentage of 2.1% which in UKMMC found the only average of 1.2% of staff experienced workplace violence in a month.

The most common form of violence in the Emergency Department of UMMC in the period of study was verbal abuse, followed by physical violence, threats, and sexual harassment. This concurs with most of the study on workplace violence which indicates non-physical violence, in particular, verbal abuse were the most frequent form of violence workers exposed to compared to physical violence (ALBashtawy, 2013; Wolf et al., 2014; Gates et al., 2011; Alshehri, 2017; Alyaemni & Alhudaithi, 2016; Çıkırlar et al., 2016; Kowalenko et al., 2013; Talas et al., 2011).

In the last 12 month period of study (n=226), female found to be more likely to be exposed in physical violence, threats, and sexual harassment compared to male, while both female and male equally exposed to verbal violence. This is similar to study that stated female were the most frequent victim for aggression (Zampieron, Galeazzo, Turra, & Buja, 2010). Noted that all respondent (n=226) were experiencing at least one episode of verbal abuse, therefore the frequency of verbal abuse is equal regardless of the demographic or

occupational characteristics. This could be because verbal abuse is somewhat effortless, and in this modern world people are more vocal in expressing their feelings, and in this case were dissatisfactions, that lead to abuse of freedom of speech.

Referring to race, Indian found to be most likely to be exposed to physical violence and sexual harassment, while Chinese were more likely to involve in threats. This might arise from the minorities of Indian and Chinese race in Malaysia that they could be subjected or associates for some racism issues.

Regarding age range, the group of 30-39 years old were found to be most likely exposed to physical violence and threats, while the age group of 20-29 years old were most likely to expose to sexual harassment. This finding is congruent with studies that revealed found that health care workers with the age of 40 years old and below are the most frequent victims of the violence incidence (Ayranci, 2005), and for the sexual harassment, it is inconsistent with the other studies that found the middle age group of 30-45 age were commonly experienced sexual harassment (Wu et al., 2012).

From the perspective of working experience, the group range of 6-10 years of experience shows the highest exposure to physical violence and threats, which possibly because those in range of working experience still consider to have moderate experience and they still young. It is agreeable that younger individuals are more energetic and aggressive when faced with such a violent situation. It is shocking finding that group range of 16-20 years of experience was more likely exposed to sexual harassment. This is expected to be verbal sexual harassment in the form of whether or not jokes, as workers with this range of working experience were mostly married.

In reference to education, Postgraduate and 'other' education level show the highest exposure to physical violence while postgraduate shows highest exposure in threats and 'other' education level were the highest in sexual harassment. This result most likely because more educated staff do have more knowledge and more prone to answer back perpetrator or at least back themselves up in a violent situation that further making a more intense scene. Noted that 'other' education level was most likely attributed to nurses that further study and hold Advance Diploma

Last but not least, according to occupation, medical assistant shows were more likely to exposed to physical violence, while nurses were the most likely to be exposed to threat and sexual harassment. This might be because the medical assistant and nurse were the first personnel to receive patients in the ED and the longer time spent with patients. In ED of UMMC, most of the medical assistant were male and most nurses were female, that in certain intense, or violent-prone situation, the medical assistant will be assisting nurse that lead to the risk of exposure to violence for them both.

Nevertheless, when combining all the violent events together, the study findings indicated that there was only a statistically significant difference in the frequency of workplace violence among ED workers of UMMC when based on education and occupation.

Comparing all violent events by occupation revealed that Physicians were significantly more like likely to be exposed to violence compare to Radiographer, the Pharmacist/Pharmacist assistant and Security guard. Nurses were more likely to be exposed to violence compare to Radiographer, Pharmacist/Pharmacist assistant, Clerk, and security guard. Medical assistants were more likely to be exposed to violence compare to Radiographer Pharmacist/Pharmacist assistant, and security guard. This may be because

these three professions of Physicians, Nurses and Medical assistants were the main personnel in ED and the fact that they were permanently working in ED without rotation to other departments, has increased their risk to the exposure of violence in the workplace. This finding was in contrast to the study by Gates et al., (2011) that found no statistically significant difference in the frequency of violence with the occupational characteristic. However, a study by Kowalenko et al., (2013) found to be consistent with this study on the differences by the occupation of the ED workers.

5.3.2 Factors contributing to workplace violence

The highest contribution factors for violence against ED workers in UMMC were from the long waiting time to receive service. This result congruent with other studies that suggest prolonging waiting time as the predominant reason for violence in the ED (Hamdan & Hamra 2015; Pich, Hazelton, Sundin, & Kable, 2011; AlBashtawy & Aljezawi, 2016; Abdellah & Salama, 2017). However, a study by Alshehri (2017) shows different finding as such long waiting time fall second, after mental illness being the highest contributing factor for violence in ED. The situation in ED of UMMC could be because of the overcrowded patient in ED the that most of the uncritical patient need to wait for quite a long period of time before receiving service, thus accelerate to violence towards the ED workers.

The second highest contributing factor of violence in the ED of UMMC was the failure of workers to meet the desire of the patient or his companions. This could arise from the lack of education or ignorance of the patient and visitors on how the ED works. Most of patients

or visitors have the expectation to get fast consultation or treatment when they came to ED despite any condition they are in, while actually ED is meant for the emergency cases and the priority must always be given to the critical or 'red zone' patients. The failure of the public to understand this, lead to overcrowded in ED for unnecessary cases which in worse scenario create such problem like violence.

Other alarming reasons for violence towards ED workers in UMMC were the impact of disease or pain, influence of alcohol or drugs, and mental health or psychiatric patients. These reasons usually result in physical violence rather than verbal violence and it was supported by a lot of studies (Hamdan & Hamra 2015; Spector, Zhou & Che 2014). The explanation for this is that patients were unable to consciously control their action as the cognitive and behavioural changes once pain, alcohol or drugs, and mental illness intervene (Anderson & West 2011; Han et al. 2015).

5.3.3 Reporting behaviour

It is evident from the study that victims of the violence were prone not to report the violent incident to the administration by the low reporting cases recorded. Nearly all of the respondent (92%) exposed to violence regardless of the types of violence did not report the incidences. Consistently, vast of previous studies (Alyaemni & Alhudaithi, 2016; Ashton et al., 2018; Banda et al., 2016; Çıkırıklar et al., 2016; Han et al., 2017; Hogarth et al., 2016; Lenaghan et al., 2018) found the same result of underreporting and workplace violence were often experienced as part of an unspoken culture within the Emergency Department.

This suggests that the actual rate of violence in the ED of UMMC were much higher than already known.

It is interesting to find from the study that the most common reason for not reporting the violence incident was that the victim did not think they would benefit from it. Similarly, in a few studies found that the underreporting problem associated with the lack of trust worker in the leadership and the justice system, such to say that no resolution will be reached even the incident is reported. Continually, most of the respondent also came into the conclusion that the incident was not important (Cikriklar et al., 2016; Alyaemni & Alhudaithi, 2016; Esmailpour et al, 2011).

Other common reasons were fear of consequences on oneself and their work if they report the violent incident, which congruent to the study by Alyaemni & Alhudaithi (2016). To avoid hassle after reporting which they might then been the question, or interview about the incident, most of the workers to just let it slide without writing any report. After all, many violence does not result in injury thus it has not been taken seriously by the victims.

5.3.4 Demographic and occupational characteristics associated with safety, and level of confidence when dealing with workplace violence.

Reducing workplace violence and ensuring workers feel safe at the workplace is compulsory for every healthcare provider (Partridge & Affleck, 2017). After all, it was found that feeling of safety was related to satisfaction of workers on their job. There were studies that revealed about differences in the feeling of safety by occupational or

demographic characteristics studies that found nurses were more likely to feel less safe compared to Physicians, and males are more likely feel safe working in ED (Gates et al., 2011, Kowalenko et al, 2013). In a study by Gates et al., (2011), suggest that race and education are not related to the feeling of safety in the workplace. Similarly, this particular study in UMMC found that feeling of safety does not differ based on gender, age, race or education. However, the feeling of safety is significantly differ based on working experience, and occupation.

Those with 1-5 years of experience significantly feel less safe when working in ED compare to 6-5 years, 11-15 years, as well as 16-20 years of experience. This may be because more experienced workers compared to less experienced workers, were more familiar and used to those violence situations that they know the violence incidents very rarely result in physical injuries, and they will not be affected much, physically thus explained their higher feeling of safety in the ED.

Comparing safety scale by occupation revealed that Health care assistant significantly feels less safe working in ED compare to Pharmacist/Pharmacist assistant and Radiographer, while clerks were significantly felt safer compared to all other professions. It is possible that Healthcare assistant might feel their job scope were less important than those Radiographer or the Pharmacist that they oftentimes underappreciate by patients or visitors therefore most likely to be the target for dissatisfactions for instance. Clerks were more likely to feel safe working in ED above all other professions since they were protected by the glass wall and their job scope for patient registration and receive payment does not

involve any physical contact as well as the short period of interaction with patients or visitors.

Moving on, the result illustrated that level of confidence when dealing with workplace violence does not differ based on age and race. In contrast, education, experience, and occupation do shows statistically significant differences in the level of confidence when dealing with workplace violence among ED workers in UMMC. This finding is incongruent to previous study that found no relation between level of confidence and the race, education, or occupation (Gates et al., 2011), while another study by Kowalenko et al. (2013) supported the result of this study on the existing of statistically significant difference in level of confidence by occupation.

Comparing confidence scale by occupation revealed that physicians were significantly felt more confident when dealing with workplace violence compare to nurse, medical assistant, radiographer and clerk. Nurses were significantly felt less confident than the security guard, medical assistant and pharmacist/pharmacist assistant.

Regarding occupation, different professions might have different views on violence. For instance, physicians whose job basically to treat patients, and had learned the situations in hospital early from the start would see violence as normal scene or part of the job so they feel more confident handling it, while a clerk whose job to do only registration or receive payment, not necessarily exposed to such violence situation earlier before they work in ED, thus might view it as quite a big deal and do feel lack of confidence in handling it.

5.5 Benefit of the study

This research is beneficial for its contribution to knowledge on the topic of workplace violence in the Emergency Department of University Malaya Medical Centre. It has proposed understanding and ideas that will become the foundation for the furthering of upcoming explorations. Regarding its contribution in the area of practice, this study has acknowledged the various occupation in Emergency Department accordingly, which would help in targeting a certain specific group that most exposed to violence at the workplace for an effective training and education program.

Regardless the numbers of the laws and regulation on violence in Malaysia, most of the verbal abuses including teasing, demeaning, innuendo, and teasing is not a crime even though these abuses might lead victims to hurt themselves (Zainal et al., 2018). Although several Acts and regulations have been developed to protect employees from WPV, awareness level among Malaysian employees and employers on the detrimental effects of WPV and how to handle it requires a lot of improvement. These initiatives will only be effective with the support from the top management and the team in an organization

This study attempted to guide other researchers, healthcare management, and the central government in the formation, or improvement and enforcement of policies that will lead to a regime where workplace violence against Emergency Department workers issues will not be taken for granted.

5.6 Limitation of the study

It is very important to acknowledge the limitation of the study as it may be considered for improvement in the future study for the related topic. The sampling technique used in the study was quota sampling which only provided robust information about the responding sample instead of generalizing it to the wider population. Furthermore, due to time and cost constraints, the participants of the study were sampled from a single, semi-government hospital, in a limited period of time, having said again, the result of this study can't be generalized yet can only represent to selected unit of the study, within those period of time which study was conducted (Brown, G., Low, N., Franklyn, R., Drever, E., & Mottram, C., 2017).

Moreover, it should be noted that the data was self-reported, which the survey was relying on the memory and recall capacity of the participants over the past 12 months period of time. It is quite a long period for some individual, which participant's recall may be inaccurate and bias responses were likely introduced.

Finally, for the close-ended questionnaire that was conducted in this study, the answers were not surprising and cannot discover new insight and scene. Identifying the risk and occurrence of workplace violence would be more manageable at the organization level, but cannot determine the details on how the Emergency Department workers perceive those violence incidents. Therefore, intervention or qualitative study could be better targeted the actual problems (Kazi & Haslam, 2013).

5.7 Future research

Future research should aim at generalizing these finding to a wider population. The same quantitative survey can be conducted with more diverse participant's background as in to include different types of hospitals in the different region of the country, as well as increasing the number of participants, as it is expected to generate more distinct results. The random sampling approach, and reducing the recall period of the study are more likely to minimize the bias and inaccurate responses.

Furthermore, qualitative study can be conducted in the future to further investigate and gain more details and specify how the Emergency Department or other health care workers perceive workplace violence and its effect towards them, and thus may lead to more study that would focus on the practices and measures that can prevent or at least further minimized workplace violence in the health care industry.

5.8 Recommendation

Workplace violence in the Emergency Department is inevitable. However, through proper research, policies, legislation, training and education, this problem can be controlled and minimized in the future.

The existing policies and legislation regarding workplace violence against health care workers shall be review for further improvement, and the enforcement of those policies and legislation are equally as important. The essential of reporting violence incidents at workplace must be emphasized to all workers, whether or not any injuries involved, while

management shall ensure appropriate punitive measures are taken to culpable perpetrators with the knowledge of the victims so that the workers know that their voice is heard and thus are more willing to report such incidents in the future. It is crucial as lack of data from under-reporting lead to difficulties in determining the actual contributing factors and making preventive actions.

Moreover, management should continuously strive to reduce waiting time for patients in ED, or at least provide a conducive waiting environment and ensure effective communication with patients and visitors by assigning a staff for that particular purpose in order to minimize dissatisfactions, or by any means to educate the clients on the real situations in Emergency Department.

A continuous training and education program is crucial and should be implemented to manage workplace violence. All health care workers, especially the most identified to be exposed to such violence must attend the program. ED workers shall learn that violence is not a part of their job. The education program should be beyond the traditional sermonic approach and provide opportunities to engage in role-playing and simulation exercises. These approaches will increase the worker's confidence in their abilities to identify potentially violent individuals, or situations and to use strategies to prevent and manage the violence. This would include the improvement of worker's awareness as well as their communication skills.

5.9 Conclusion

Exposure to workplace violence is an important concern for Emergency Department workers. Psychological effect and mental health have been associated with exposure to violence. Therefore, workers physical and mental safety should be a priority in the Emergency Department. All health professionals must adhere to the preventive measure of violence, and cooperate with the management in reporting such violence events, regardless of their personal feelings. The purpose of this research is to describe workplace violence in ED of UMMC and the result demonstrated that violence is a common occurrence, while ED workers have a moderate feeling of safety and level of confidence when dealing with violence at the workplace. Further research is needed to develop effective strategies in preventing or minimize violence towards Emergency Department workers.



REFERENCES

- Abbas, R. A., & Selim, S. F. (2011). Workplace violence-A survey of diagnostic radiographers in Ismailia governorate hospitals. Egypt. *Journal of American Science*, 7(6), 1049-1058. doi: 10.1.1.378.8348.
- Abualrub, R. F., & Al-Asmar, A. H. (2011). Physical violence in the workplace among Jordanian hospital nurses. *Journal of Transcultural Nursing*, 22(2), 157-65. doi:10.1177/1043659610395769.
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialities*, 4(2), 330-333. doi: 10.7713/ijms.2013.0032.
- Ahmad, A., Mazlan, N. H., (2013). Identifying types of mental health problems and aggression among security guards: Are they totally safe. *Psychology and Behavioral Sciences*, 2(3). 130-137. doi: 10.11648/j.pbs.20130203.18.
- Alameddine, M., Mourad, Y., & Dimassi, H. (2015). A national Study on nurses' exposure to occupational violence in Lebanon: Prevalence, consequences and associated factors. *PloS one* 10(9). doi: 10.1371/journal.pone.0137105.
- Alkorashy, H. A. E., & Al Moalad, F. B. (2016). Workplace violence against nursing staff in a Saudi university hospital. *International Nursing Review*, 63(2), 226-232. <https://doi.org/10.1111/inr.12242>.
- Al-Omari, M. A., Johari, H., & Choo, L. S. (2012). Workplace violence: A case in Malaysian higher education institute. *Business Strategy Series*, 13(6), 274-283. <https://doi.org/10.1108/17515631211286119>.

- Alshehri, F. A. (2017). *Workplace violence against nurses working in emergency departments in Saudi Arabia : a cross-sectional study* (Doctoral dissertation). Retrieved from <https://digital.library.adelaide.edu.au/dspace/bitstream/2440/104816/4/01front.pdf>.
- Alyaemni, A., & Alhudaithi, H. (2016). Workplace violence against nurses in the emergency departments of three hospitals in Riyadh, Saudi Arabia: A cross-sectional survey. *NursingPlus Open*, 2, 35–41. <https://doi.org/10.1016/j.npls.2016.09.001>.
- Aprameya, A. (2016, April). Quota Sampling: When to use it and how to do it correctly [Web log post]. Retrieved from <https://blog.socialcops.com/academy/resources/quota-sampling-when-to-use-how-to-do-correctly/>.
- Arunah, C., Teo, A. H., Faizah, A., Mahathar A. W., Tajuddin, A. M. N., Khairi, K., ... Kasuadi, H. (2010). *Emergency and trauma services in Malaysian hospitals*. Retrieved from http://www.crc.gov.my/nhsi/wp-content/uploads/publications/NHEWS_Hospital2010/Chapter6Hospitals_Report_2010.pdf.
- Ashton, R. A., Morris, L., & Smith, I. (2018). A qualitative meta-synthesis of emergency department staff experiences of violence and aggression. *International Emergency Nursing*, 1–10. <https://doi.org/10.1016/J.IENJ.2017.12.004>.
- Atan, S. U., Arabaci, L. B., Sirin, A., Isler, A., Donmez, S., Guler, M. U., ... Tasbasi, F. Y. (2012). Violence experienced by nurses at six university hospitals in Turkey. *Journal of Psychiatric and Mental Health Nursing*, 20(10), 882-889. doi:10.1111/jpm.12027.

- Ayranci, U. (2005). Violence toward health care workers in emergency departments in west Turkey. *Journal of Emergency Medicine*, 28(3), 361–365. doi:10.1016/j.jemermed.2004.11.018.
- Behnam, M., Tillotson, R. D., Davis, S. M., & Hobbs, G. R. (2011). Violence in the Emergency Department: A national survey of emergency medicine residents and attending physicians. *Journal of Emergency Medicine*, 40(5), 565–579. doi:10.1016/j.jemermed.2009.11.007.
- Behnam, M., Tillotson, R. D., Davis, S. M., & Hobbs, G. R. (2011). Violence in the emergency department: A national survey of emergency medicine residents and attending physicians. *The Journal of Emergency Medicine*, 40(5), 565–579. doi:10.1016/j.jemermed.2009.11.007.
- Belayachi, J., Berrechid, K., Amlaiky, F., Zekraoui, A., & Abouqal, R. (2010). Violence toward physicians in emergency departments of Morocco: Prevalence, predictive factors, and psychological impact. *Journal of Occupational Medicine and Toxicology*, 5 (27). doi:10.1186/1745-6673-5-27.
- Bernama. (2017, April, 29). Physical, verbal abuse new threat for KKM staff. *Borneo Post Online*. Retrieved from <https://www.theborneopost.com/2017/04/29/physical-verbal-abuse-new-threat-for-kkm-staff/>.
- Blando, J. D., O'Hagan, E., Casteel, C., Nocera, M. A., & Peek-Asa, C. (2013). Impact of hospital security programmes and workplace aggression on nurse perceptions of safety. *Journal of Nursing Management*, 21(3), 491-498. doi: 10.1111/j.1365-2834.2012.01416.x.

- Boyle, M. J., & Wallis, J. (2016). Working towards a definition for workplace violence actions in the health sector. *Safety in Health*, 2(1). doi: 10.1186/s40886-016-0015-8.
- Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>.
- Brown, G., Low, N., Franklyn, R., Drever, E., & Mottram, C. (2017, November). *GSR quota sampling guidance: What to consider when choosing between quota samples and probability-based designs*. Retrieved from <https://www.statisticsauthority.gov.uk/wp-content/uploads/2017/12/Quota-sampling-guidance.pdf>.
- Burrell, N. A., & Gross, C. (2017). Quantitative research, purpose of. In *The sage encyclopedia of communication research method* (pp. 1378-1380). Retrieved from doi:10.4135/9781483381411.n476.
- Camerino, D., Estryn-Behar, M., Conway, P. M., Van Der Heijden, B. I. J. M., & Hasselhorn, H. M. (2008). Work-related factors and violence among nursing staff in the European NEXT study: A longitudinal cohort study. *International Journal of Nursing Studies*, 45(1), 35–50. doi:10.1016/j.ijnurstu.2007.01.013.
- Centre for Disease Control and Prevention. (2018, March). *Occupational violence*. Retrieved from <https://www.cdc.gov/niosh/topics/violence/default.html>.
- Chapman, D. P., Liu, Y., Presley-Cantrell, L. R., Edwards, V. J., Wheaton, A. G., Perry, G. S., & Croft, J. B. (2013). Adverse childhood experiences and frequent insufficient sleep in 5 U.S. States, 2009: a retrospective cohort study. *BMC Public Health*, 13(1), 3. doi:10.1186/1471-2458-13-3.

Çıkrıklar, H., Yürümez, Y., Güngör, B., Aşkın, R., Yücel, M., & Baydemir, C. (2016).

Violence against emergency department employees and the attitude of employees towards violence. *Hong Kong Medical Journal*, 22(5), 464–471. <https://doi.org/10.12809/hkmj154714>.

Craig, A. (2016). *Registered Nurses' attitudes towards, and experiences of, aggression and violence in the acute hospital setting*. Retrieved from https://repository.digitalnz.org/system/uploads/record/attachment/784/registered_nurses__attitudes_towards__and_experiences_of__aggression_and_violence_in_the_acute_hospital_setting.pdf.

Creswell, J.W. (2013) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed). London, Sage Publications, Inc.

Dolph, C. L., Sheshukov, A. Y., Chizinski, C. J., Vondracek, B., & Wilson, B. (2010). The Index of Biological Integrity and the bootstrap: Can random sampling error affect stream impairment decisions?. *Ecological Indicators*, 10(2), 527–537. <https://doi.org/10.1016/j.ecolind.2009.10.001>.

Edwards, A. (2016, May 23). Hospital fights abuse with zero tolerance policy. *Malay Mail*. Retrieved from <https://www.malaymail.com/news/malaysia/2016/05/23/hospital-fights-abuse-with-zero-tolerance-policy/1125375#lq8VXrHFhBV4UypW.97>.

Fafliora, E. (2015). Assessment and Analysis of Workplace Violence in a Greek Tertiary Hospital. *Archives of Environmental and Occupational Health*, 70, 256-264. doi: 10.1080/19338244.2013.879564.

- Farrell, G. A., Shafiei T. (2012). Workplace aggression, including bullying in nursing and midwifery: A descriptive survey (the SWAB study). *International journal of nursing studies*, 49(11), 1423-1431. doi:10.1016/j.ijnurstu.2012.06.007.
- Ferri, P., Guerra, E., Marcheselli, L., Cunico, L., & Lorenza, R. Di. (2015). Empathy and burnout: an analytic cross-sectional study among nurses and nursing students. *Acta Biomed for Health Professions*, 86(S.2), 104–115. Retrieved from <https://www.mattioli1885journals.com/index.php/actabiomedica/article/viewFile/4792/3529>.
- Ferri, P., Silvestri, M., Artoni, C., & Lorenzo, R. Di. (2016). Workplace violence in different settings and among various health professionals in an Italian general hospital : a cross-sectional study. *Psychology Research and Behaviour Management*, 2016:9, 263–275. doi: 10.2147/PRBM.S114870.
- Fute, M., Mengesha, Z. B., Wakgari, N., & Tessema, G. A. (2015). High prevalence of workplace violence among nurses working at public health facilities in Southern Ethiopia. *BioMed Central Nursing*, 14(9). doi: 10.1186/s12912-015-0062-1.
- Gates, D. M., Ross, C. S., & McQueen, L. (2006). Violence against emergency department workers. *Journal of Emergency Medicine*, 31(3), 331–337. doi:10.1016/j.jemermed.2005.12.028.
- Gates, D., Gillespie, G., Kowalenko, T., Succop, P., Sanker, M., & Farra, S. (2011). Occupational and demographic factors associated with violence in the emergency department. *Advanced Emergency Nursing Journal*, 33(4), 303–313. doi: 10.1097/TME.0b013e3182330530.

- Gelo, O., Braakman, D., & Benetka, G. (2008). Quantitative and qualitative research: beyond the debate. *Integrative psychological and behavioral science*, 42(3), 262-290. doi: 10.1007/s12124-008-9078-3.
- Gilbert, N. (2001). *Social research update 35: The importance of pilot studies*. Retrieved from <http://sru.soc.surrey.ac.uk/SRU35.html>.
- Gillespie, G. L., Gates, D. M., Berry, P. (2013). Stressful incidents of physical violence against emergency nurses. *The online journal of issues in nursing*, 18(1:2). doi:10.3912/OJIN.Vol18No01Man02.
- Gillespie, G. L., Gates, D. M., Kowalenko, T., Bresler, S., & Succop, P. (2014). Implementation of a comprehensive intervention to reduce physical assaults and threats in the emergency department. *Journal of emergency nursing*, 40(6), 586–591. doi:10.1016/j.jen.2014.01.003.
- Gillespie, G. L., Gates, D. M., Miller, M., & Howard, P. K. (2010). Workplace violence in healthcare settings: Risk factors and protective strategies. *Rehabilitation nursing*, 35(5), 177–184. doi:10.1002/j.2048-7940.2010.tb00045.x.
- Hahn, S., Zeller, A., Needham, I., Kok, G., Dassen, T., & Halfens, R. J. G. (2008). Patient and visitor violence in general hospitals: A systematic review of the literature. *Aggression and Violent Behavior*, 13(6), 431–441. doi:10.1016/j.avb.2008.07.001.
- Hallberg, IR 2008, 'Surveys', in R Watson, H McKenna, S Cowman & J Keady (eds), *Nursing research: designs and methods*, Elsevier, Edinburgh, pp. 179-187.
- Han, C. Y., Lin, C. C., Barnard, A., Hsiao, Y. C., Goopy, S., & Chen, L. C. (2017). Workplace violence against emergency nurses in Taiwan: A phenomenographic

study. *Nursing outlook*, 65(4), 428–435.
<https://doi.org/10.1016/j.outlook.2017.04.003>.

Harrel, E. (2011). *Workplace Violence, 1993-2009: National Crime Victimization survey and the Census of fatal occupational injuries*. Retrieved from <https://www.bjs.gov/content/pub/pdf/wv09.pdf>.

Hegney, D., Tuckett, A., Parker, D., & Eley, R. (2010). Workplace violence: differences in perceptions of nursing work between those exposed and those not exposed: a cross-sector analysis. *International Journal of Nursing Practice*, 16(2), 188-202. doi:10.1111/j.1440-172X.2010.01829.x.

Hogarth, K. M., Beattie, J., & Morphet, J. (2016). Nurses' attitudes towards the reporting of violence in the emergency department. *Australasian Emergency Nursing Journal*, 19(2), 75–81. <https://doi.org/10.1016/j.aenj.2015.03.006>.

International Labour Office, International Council of Nurses, mornikWorld Health Organization, & Public Services International. (2002). *Framework Guidelines for Addressing Workplace Violence in the Health Sector*. Retrieved from <https://kennisopenbaarbestuur.nl/media/233670/Framework-Guidelines-for-Addressing-Workplace-Violence-in-the-Health-Sector.pdf>.

Kadam, P., & Bhalerao, S. (2010). Sample size calculation. *International Journal of Ayurveda Research*, 1(1), 55–57. doi:10.4103/0974-7788.59946.

Kamaluddin, M. R., Shariff, N. S. M., Othman, A., Ismail, K. H., & Saat, G. A. M. (2014). Associations between personality traits and aggression among malay adult male

- inmates in Malaysia. *Asean Journal of Psychiatry*, 15(2), 176–185. doi: 10.1.1.675.9275.
- Kansagra, S. M., Rao, S. R., Sullivan, A. F., Gordon, J. A., Magid, D. J., Kaushal, R., & Blumenthal, D. (2008). A survey of workplace violence across 65 U.S. emergency departments. *Academic emergency medicine*, 15(12), 1268–1274. doi:10.1111/j.1553-2712.2008.00282.
- Kazi, A. and Haslam, C.O. (2013). Stress management standards: a warning indicator for employee health. *Occupational medicine*, 63(5), pp.335-340.
- Kelly, S. (2014). Overview and Summary: Societal violence: What is our response. *The online journal of issues in nursing*, 19(1). doi:10.3912/OJIN.Vol19No01ManOS.
- Kitaneh, M., & Hamdan, M. (2012). Workplace violence against physicians and nurses in Palestinian public hospitals: a cross - sectional study, 240(July 2011). doi:10.1186/1472-6963-12-469.
- Kocabiyik, N., Yildirim, S., Turgut, E. O., Turk, M. K., & Ayer, A. (2015). A study on the frequency of violence to healthcare professionals in a mental health hospital and related factors. *The Journal of Psychiatry and Neurological Sciences*, 28 (3), 112-118. doi: 10.5350/DAJPN2015280203.
- Kowalenko, T., Gates, D., Gillespie, G. L., Succop, P., & Mentzel, T. K. (2013). Prospective study of violence against ED workers. *American Journal of Emergency Medicine*, 31(1), 197–205. doi: 10.1016/j.ajem.2012.07.010.
- Krejcie, R.V., & a, D.W. (1970). Determining Sample Size for Research Activities. *Educational and psychological measurement*, 30, 607-610. Retrieved from

https://home.kku.ac.th/sompong/guest_speaker/KrejcieandMorgan_article.pdf

Laerd dissertation (2012). *Quota Sampling*. Retrieved from <http://dissertation.laerd.com/quota-sampling.php>.

Lau, B. (2016, October 20). Malaysia's MOH takes a stand against threats and abuse faced by healthcare employees. *Mims Today*. Retrieved from <https://today.mims.com/malaysia-s-moh-takes-a-stand-against-threats-and-abuse-faced-by-healthcare-employees>.

Lenaghan, P. A., Cirrincione, N. M., & Henrich, S. (2018). Preventing emergency department violence through design. *Journal of emergency nursing*, 44(1), 7–12. <https://doi.org/10.1016/j.jen.2017.06.012>.

Magnavita, N., & Heponiemi, T. (2012). Violence towards health care workers in a Public Health Care Facility in Italy: a repeated cross-sectional study. *BMC Health Services Research*, 12(1), 108. doi: 10.1186/1472-6963-12-108.

Marín, G., & Marín, B. V. (1991). Research with Hispanic populations. Sage Publications.

Mckenna, B. G., Smith, N. A., Poole, S. J., & Coverdale, J. S. (2003). Horizontal violence: experiences of Registered Nurses in their first year of practice. *Journal of advance nursing*, 42(1), 90-96. Retrieved from <https://www.mc.vanderbilt.edu/root/pdfs/nursing/HorizontalViolenceArticle.pdf>.

Moore, C. G., Carter, R. E., Nietert, P. J., & Stewart, P. W. (2011). Recommendations for planning pilot studies in clinical and translational research. *Clinical and translational*

science, 4(5), 332–337. <https://doi.org/10.1111/j.1752-8062.2011.00347.x>.

Morrison, E. F. (1994). The evolution of a concept: Aggression and violence in psychiatric settings. *Archives of psychiatric nursing*, 8 (4), 245-253. doi: 10.1016/0883-9417(94)90066-3.

Muthiah, W. (2017, April 28). Health Ministry launches new guidelines to protect staff. *The Star*. Retrieved from <https://www.thestar.com.my/news/nation/2017/04/28/health-ministry-launches-new-guidelines-to-protect-staff/>.

Ng, C., & Othman, J. (2002). Unwanted and Unwelcome: Sexual Harassment in the Malaysian Workplace. *Gender, Technology And Development*, 6(3), 389–407. <https://doi.org/10.1177/097185240200600304>.

Nik Azlan, N. M., Ismail, M. S., Azizol, M. (2013). Management of Emergency Department Overcrowding (EDOC) in a Teaching Hospital. *Medicine & Health*, 8(1), 42-46. Retrieved from <http://www.medicineandhealthukm.com/article/management-emergency-department-overcrowding-edoc-teaching-hospital>.

Occupational Safety and Health Administration (2015, December). *Workplace violence in healthcare: Understanding the challenge*. Retrieved from <https://www.osha.gov/Publications/OSHA3826.pdf>.

Park, M., Cho, S.-H., & Hong, H.-J. (2015). Prevalence and perpetrators of workplace violence by nursing unit and the relationship between violence and the perceived work environment. *Journal of Nursing Scholarship*, 47(1), 87–95. doi:

10.1111/jnu.12112.

Partridge, B., & Affleck, J. (2017). Verbal abuse and physical assault in the emergency department : Rates of violence , perceptions of safety , and attitudes towards security. *Australasian Emergency Nursing Journal*, 20(3), 139–145. doi:10.1016/j.aenj.2017.05.001.

Pati, D., Pati, S., & Harvey, T. E. (2016). Security Implications of Physical Design Attributes in the Emergency Department. *Health Environments Research & Design Journal*, 9(4), 50–63. doi:10.1177/193758671562654.

Phillips, J. P. (2016). Workplace Violence against Health Care Workers in the United States. *New England Journal of Medicine*, 374(17), 1661–1669. doi:10.1056/NEJMr1501998.

Pinar, R., & Ucmak, F. (2011). Verbal and physical violence in emergency departments: a survey of nurses in Istanbul, Turkey. *Journal of clinical nursing*, 20(3-4), 510-517. doi:10.1111/j.1365-2702.2010.03520.x.

Ramacciati, N., Andrea, C., Beniamo, A. (2013). Wellbeing at work: going towards a global approach to violence in the ER. Scenario, 30(2), S51-S52. Retrieved from https://www.researchgate.net/publication/257919800_Wellbeing_at_work_going_towards_a_global_approach_to_violence_in_the_ER.

Ramacciati, N., Ceccagnoli, A., Addey, B., & Rasero, L. (2018). Violence towards Emergency Nurses. The Italian National Survey 2016: A qualitative study. *International Journal of Nursing Studies*, 81, 21–29. <https://doi.org/10.1016/j.ijnurstu.2018.01.017>.

- Ramacciati, N., Ceccagnoli, A., Addey, B., Lumini, E., & Rasero, L. (2017). Violence towards emergency nurses: A narrative review of theories and frameworks. *International Emergency Nursing*, 1-11. <https://doi.org/10.1016/j.ienj.2017.08.004>.
- Registered Nurses' Association of Ontario (2009). Preventing and managing violence in the workplace. Retrieved from http://rnao.ca/sites/rnao-ca/files/Preventing_and_Managing_Violence_in_the_Workplace.pdf.
- Resnik, B. D. (2015). *What is ethics in research & Why is it Important*. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>.
- Ruth, P., Samsiah, M., Hamidah, H., & Lp, S. (2009). Workplace Violence Experienced by Nurses in Universiti Kebangsaan Malaysia Medical Centre. *Med & Health*, 4(2), 115–121. Retrieved from <http://journalarticle.ukm.my/1949/>.
- Saidu Badara, M. & Saidin, S. Z. (2014). Internal audit effectiveness: Data screening and preliminary analysis. *Asian Social Science*, 10(10), 76–85. <https://doi.org/10.5539/ass.v10n10p76>.
- Shahian, D. M., Liu, X., Meyer, G. S., & Normand, S. T. (2014). Comparing teaching versus nonteaching hospitals: the association of patient characteristics with teaching intensity three common medical conditions. *Academic Medicine* 89(1), 94-106. doi: 10.1097/ACM.0000000000000050.
- Shamsudin, F. M., & Rahman, R. A. (2006). Workplace violence in Malaysia and the relevance of OSHA 1994. *Malaysian Management Review*, 41(1), 1-20.

- Spector, P. E., Zhou, Z. E., & Che, X. X. (2014). Nurse exposure to physical and nonphysical violence , bullying , and sexual harassment : A quantitative review. *International Journal of Nursing Studies*, 51(1), 72–84. <https://doi.org/10.1016/j.ijnurstu.2013.01.010>.
- Squires, A., Aiken, L. H., van den Heede, K., Sermeus, W., Bruyneel, L., Lindqvist, R., ... Matthews, A. (2013). A systematic survey instrument translation process for multi-country, comparative health workforce studies. *International Journal of Nursing Studies*, 50(2), 264–273. <https://doi.org/10.1016/j.ijnurstu.2012.02.015>.
- Suhaila, O., & Kg, R. (2012). Prevalence of Sexual harassment and its associated factors among registered nurses working in government hospitals in Melaka state, Malaysia. *Medical Journal Malaysia* 67(5), 506–517. Retrived from <https://e-mjm.org/2012/v67n5/sexual-harassment.pdf>.
- Talas, M. S., Kocaöz, S., & Akgüç, S. (2011). A survey of violence against staff working in the emergency department in Ankara, Turkey. *Asian Nursing Research*, 5(4), 197–203. <https://doi.org/10.1016/j.anr.2011.11.00>.
- Taylor, J. L., Rew, I. (2010). A systematic review of the literature: workplace violence in the emergency department. *Journal of Clinical Nursing*, 20(7-8), 1072-1085. doi: 10.1111/j.1365-2702.2010.03342.x.
- Terzoni, S., Ferrara, P., Cornelli, R., Ricci, C., Oggioni, C., & Destrebecq, A. (2015). Violence and unsafety in a major Italian hospital: experience and perceptions of health care workers. *La Medicina del lavoro*, 106(6), 403–411. Retrieved from <https://pdfs.semanticscholar.org/06ff/086e9aeb5aa4b0ef40feeb9e9cc3f189c463.pdf>

- Thompson, P. (2015). *Mitigating violence in the workplace*. Retrieved from https://www.ena.org/docs/default-source/resource-library/practice-resources/position-statements/joint-statements/mitigatingviolence.pdf?sfvrsn=ae0b949c_6.
- U.S. Department of Labor, Occupational Safety and Health Administration. (2016). *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers* (OSHA 3148-06R 2016). Retrieved from <https://www.osha.gov/Publications/osh3148.pdf>.
- United States Department of Labor (2017, November). *Bureau of Labor Statistics: Injuries, Illnesses, and Fatalities*. Retrieved from <https://www.bls.gov/iif/soii-chart-data-2016.htm>.
- University Malaya Medical Centre. (n.d). *Annual Report 2016*. Retrieved from <https://www.ummc.edu.my/ummc/annual-report.asp?keyid>.
- Velasco, E. (2010). Inclusion Criteria In: *Encyclopedia of Research Design. Sage Research Method*. doi:10.4135/9781412961288.
- Vogel, L. (2016). Abusive patients: Is it time for accountability?. *The Canadian Medical Association Journal*, 188(11), E241–E242. <https://doi.org/10.1503/cmaj.109-5266>.
- Walker, W. (2005). The strengths and weaknesses of research designs involving quantitative measures. *Journal of Research in Nursing*, 10(5), 571-582. doi:10.1177/136140960501000505.

- Wei, C.Y., Chiou, S. T., Chien, L.Y., & Huang, N. (2016). Workplace violence against nurses – Prevalence and association with hospital organizational characteristics and health-promotion efforts: Cross-sectional study. *International Journal of Nursing Studies*, 56, 63–70. doi:10.1016/j.ijnurstu.2015.12.012.
- Wilson, B. L., Diedrich, A., Phelps, C., Choi, M. (2011). Bullies at work: The impact of horizontal hostility in the hospital setting and intent to leave. *Journal of Nursing Administration*, 14(11): 453-458. doi: 10.1097/NNA.0b013e3182346e90.
- Wolf, L. A., Delao, A. M., & Perhats, C. (2014). Nothing changes, nobody cares: Understanding the experience of emergency nurses physically or verbally assaulted while providing care. *Journal of Emergency Nursing*, 40(4), 305-310. doi:10.1016/j.jen.2013.11.006
- Wolf, L. A., Delao, A. M., Perhats, C., Clark, P. R., Moon, M. D., Baker, K. M., ... Lenahan, G. (2015). Exploring the management of death: Emergency nurses' perceptions of challenges and facilitators in the provision of end-of-life care in the emergency department. *Journal of Emergency Nursing*, 41(5), 1–11. doi: 10.1016/j.jen.2015.05.018.
- Wu, S., Chai, W., & Wang, X. (2012). Workplace Violence and Influencing Factors Among Medical Professionals in China. *American Journal of Industrial Medicine*, 55, 1000–1008. doi:10.1002/ajim.22097.
- Zainal, N., Rasdi, I., & Saliluddin, S. M. (2018). The Risk Factors of Workplace Violence among Healthcare Workers in Public Hospital. *Malaysian Journal of Medicine and*

Health Sciences, 14. Retrieved from
http://www.medic.upm.edu.my/upload/dokumen/2018120409055516_MJMHS_SP_Nov_2018.pdf.

Zamboni, J. (2018). *What Is the Meaning of Sample Size? : Sciencing*. Retrieved from
<https://sciencing.com/meaning-sample-size-5988804.html>.

Zhang, L., Wang, A., Xie, X., Zhou, Y., Li, J., Yang, L., & Zhang, J. (2017). Workplace violence against nurses: A cross-sectional study. *International Journal of Nursing Studies*, 72, 8–14. <https://doi.org/10.1016/j.ijnurstu.2017.04.002>.

Zhulavska, O & Piantkovska, A. (2016). Means of Verbalization of the concept of terrorism in the British newspaper discourse of 2014. *GISAP: Philological Sciences, Ukraine*, 16-18. doi: <http://dx.doi.org/10.18007/gisap:ps.v0i9.1256>.

Zuraida, A., & Zainal, N. (2015). Exploring Burnout Among Malaysian Junior Doctors Using the Abbreviated Maslach Burnout Inventory. *Malaysian Journal of Psychiatry*, 24(1), 1–10. Retrieved from
<http://www.mjpsychiatry.org/index.php/mjp/article/view/348/251>.

APPENDIX A

Participant Information Sheet

Workplace Violence against Emergency Department workers in University Malaya Medical Centre

Dear Participant,

You are invited to participate in this research project describe below.

Aim:

The objective of this study is to describe the frequency of workplace violence against ED workers in University Malaya Medical Centre (UMMC). It identify the risk factor of the violence and the staff's reporting behavior towards the violence. It identify if there is any difference in frequency of violence, feeling of safety, and level of confidence when dealing with workplace violence among ED workers in UMMC based on demographic and occupational characteristic.

The research team:

This study is being conducted by Saidah binti Satderi as part of requirements for the Master of Science (Occupational Safety and Health management) at Universiti Utara Malaysia under the supervision Of Dr. Mohd Faizal Bin Mohd Musa.

Who is involved:

The target population is all Emergency Department workers whose job involve in dealing with patients and visitors and should have a minimum of 12 month working in Emergency Department of UMMC.

Questionnaire:

The study uses a questionnaire to collect data to describe Workplace violence in Emergency Department Of UMMC. This questionnaire contains five sections (28 questions). The first section is demographic and occupational information, the second section addresses the violence events, the third section addresses system and means of protection available and the procedure for violence. The fourth and fifth section addresses safety scale and confident scale respectively.

Risk:

Participation in this study should involve no physical or mental discomfort. If, however you find it does, you have the right to leave the question.

Expected benefit:

There are no direct benefits to you for participating in this study. No incentives are offered. However, the results will have scientific interest that may eventually have benefits for University Malaya Medical Centre, especially the Emergency Department.

Participation and withdrawal

Participation in this study is voluntary and you are free to withdraw from this study at any time without prejudice or penalty. If you wish to withdraw, do not complete the questionnaire.

Confidentiality and security of data:

All questionnaires and responses are anonymous and will be treated and store confidentially. The information you provide will be use only for the purpose of the study and only the research team will have access for the data.

Ethics clearance and contacts:

This study complies with the ethical conduct in Malaysia and has been approved by the Medical Research Committee of University Malaya Medical centre (MREC ID No : 2018511-6287).

For complaints that are not answered by the researcher you can contact the study's principal supervisors, Dr. Mohd Faizal bin Mohd Musa on phone (+60) 193350168 or E-mail to m.faizal@umm.edu.my

For concerns or complaints about the conduct of the research study can contact the Medical Research Committee of University Malaya on phone 03-79493209/2251 or E-mail to iresearch@ummc.edu.my

Thank you for your participation in this study.

Saidah binti Satderi

Phone: (+60) 134586208

Email: saidahsatderi@ummc.edu.my



Makluman untuk Peserta

Keganasan di Tempat Kerja terhadap kakitangan Jabatan Kecemasan di Pusat Perubatan Universiti Malaya

Peserta yang dihormati,

Anda dijemput untuk mengambil bahagian dalam kajian seperti yang diterangkan di bawah.

Tujuan:

Objektif kajian ini adalah untuk menerangkan kekerapan keganasan di tempat kerja terhadap kakitangan Jabatan Kecemasan Pusat Perubatan Universiti Malaya (PPUM). Ia mengenal pasti punca keganasan dan sikap kakitangan dalam melaporkan kejadian tersebut. Kajian ini juga mengenal pasti jika terdapat sebarang perbezaan yang signifikan dalam kekerapan keganasan, perasaan selamat, dan keyakinan dalam menangani kejadian keganasan berdasarkan ciri-ciri demografik dan pekerjaan pekerja

Pasukan penyelidik:

Kajian ini dijalankan oleh Saidah binti Satderi sebagai sebahagian daripada keperluan untuk Sarjana Sains (Pengurusan Keselamatan dan Kesihatan Pekerja) di Universiti Utara Malaysia di bawah pengawasan Dr. Mohd Faizal Bin Mohd Musa.

Pihak terlibat:

Sasaran populasi adalah semua kakitangan Jabatan Kecemasan yang berurusan dengan pesakit dan pelawat dan berpengalaman minimum 12 bulan bekerja di Jabatan Kecemasan PPUM.

Soal Selidik:

Kajian ini menggunakan borang soal selidik untuk mengumpul data untuk menerangkan keganasan tempat kerja di Jabatan Kecemasan UMMC. Soal selidik ini mengandungi lima bahagian (28 soalan). Bahagian pertama adalah maklumat demografi dan pekerjaan, bahagian kedua mengenai peristiwa keganasan, bahagian ketiga mengenai sistem dan prosedur laporan kejadian keganasan, bahagian keempat dan kelima adalah soalan mengenai skala selamat dan skala keyakinan dalam menghadapi kejadian keganasan di tempat kerja.

Risiko:

Penyertaan dalam kajian ini seharusnya tidak mengganggu kestabilan mental dan fizikal peserta. Namun jika berlaku perkara yang sebaliknya, peserta mempunyai hak untuk tidak menjawab kaji selidik ini.

Manfaat yang dijangkakan:

Tiada insentif yang ditawarkan untuk peserta yang mengambil bahagian dalam kajian ini. Walau bagaimanapun, hasil kajian akan mempunyai nilai saintifik yang akhirnya boleh memberi manfaat kepada Pusat Perubatan Universiti Malaya, terutamanya Jabatan Kecemasan.

Penyertaan dan penarikan diri:

Penyertaan dalam kajian ini adalah secara sukarela dan anda bebas untuk menarik diri pada bila-bila masa tanpa prejudis atau penalti. Jika anda ingin menarik diri, sila kosongkan borang soal selidik.

Kerahsiaan dan keselamatan data:

Semua maklumat peserta akan dirahsiakan dan dianggap sulit. Maklumat yang anda berikan akan digunakan hanya untuk tujuan kajian dan hanya pasukan penyelidik yang mempunyai akses untuk data tersebut.

Pelepasan etika dan kenalan:

Kajian ini memenuhi peraturan etika di Malaysia dan telah diluluskan oleh Jawatankuasa Penyelidikan Perubatan Pusat Perubatan Universiti Malaya (MREC ID No: 2018511-6287).

Untuk aduan yang tidak dijawab oleh penyelidik, anda boleh menghubungi penyelia utama kajian Dr. Mohd Faizal bin Mohd Musa di talian (+60) 193350168 atau E-mel ke m.faizal@umm.edu.my

Untuk aduan tentang etika kajian penyelidikan boleh menghubungi Jawatankuasa Penyelidikan Perubatan Universiti Malaya di talian 03-79493209 / 2251 atau E-mel ke iresearch@ummc.edu.my

Terima kasih atas penyertaan anda dalam kajian ini

Saidah binti Satderi

Telefon: (+60) 134586208

E-mel: saidahsatderi@ummc.edu.my

APPENDIX C

QUESTIONNAIRE

Study title: Workplace Violence against Emergency Department Workers in University Malaya Medical Centre

Please place a check mark (✓) in the box that best answer the questions. Kindly make **only one selection** otherwise instructed.

Section 1: Demographic and occupational information

Have you been employed in Emergency Department for one year and above?

- ☐ Yes (**Please continue with questionnaire**)
- ☐ No (**Please don't continue with questionnaire- Thank you for your time**)

1. Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
2. Race	<input type="checkbox"/> Malay	<input type="checkbox"/> Chinese	
	<input type="checkbox"/> Indian	<input type="checkbox"/> Other: (please specify): ...	
3. Age	Please specify: years old		
4. Working experience	Please specify: years		
5. Education	<input type="checkbox"/> SPM	Diploma	
	<input type="checkbox"/> Bachelor	<input type="checkbox"/> Postgraduate	
	<input type="checkbox"/> Other: (please specify):		
6. Occupation	<input type="checkbox"/> Physician	<input type="checkbox"/> Nurse	<input type="checkbox"/> Medical assistant
	<input type="checkbox"/> Healthcare assistant	<input type="checkbox"/> Radiographer	<input type="checkbox"/> Clerk
	<input type="checkbox"/> Pharmacist/P. assistant		<input type="checkbox"/> Security guard

Please read the definition given before you proceed to the next section.

Definition:

Workplace violence: incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health.

Physical violence involve direct physical contact towards victims while non-physical violence does not involving direct physical contact towards victim.

Physical violence: occurs when an employee is exposed to the deliberate use of force such **beating, pushing, slapping, kicking, biting, pinching, stabbing, shooting** by the patient and/or their families/companions, a colleague or any other people, regardless of whether or not an injury was sustained.

Verbal abuse: This happens when someone such as (patient, patient's relatives, visitors or staff members) **shouts, curse, make innuendo, or other words to verbally insult** an employee without an intention to **bodily harm an employee**.

Threat: happens when someone (patient, patient's relatives, visitors or staff members) **uses words, gestures, behaviors to intimidate or threaten harm** (physically or other) to an employee.

Sexual harassment: any unwanted behavior of a **sexual nature, including verbal or physical**, which is **offensive to an individual** or for the perpetrator's own sexual gratification.

Section 2: Violence incidence

Please answer the following questions by ticking (✓) to the best response in relation to workplace violence during the last twelve months.

<p>7. In the last 12 months how many times have you exposed to violence in the Emergency Department? (if all your answer is never, please proceeds to section 3).</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 25%;"></th> <th style="width: 15%;">Never</th> <th style="width: 15%;">Once</th> <th style="width: 15%;">2-3 times</th> <th style="width: 15%;">4-5 times</th> <th style="width: 15%;">6 times and more</th> </tr> <tr> <td>Physical violence</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Verbal abuse</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Threats</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sexual harassment</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							Never	Once	2-3 times	4-5 times	6 times and more	Physical violence						Verbal abuse						Threats						Sexual harassment					
	Never	Once	2-3 times	4-5 times	6 times and more																														
Physical violence																																			
Verbal abuse																																			
Threats																																			
Sexual harassment																																			
<p>8. In most of the incident, who were the perpetrator of the violent? (Tick as many as relevant).</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 40%;"></th> <th style="width: 15%;">Patients</th> <th style="width: 15%;">Visitors</th> <th style="width: 10%;">N/A</th> </tr> <tr> <td>Physical violence</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Verbal abuse</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Threats</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sexual harassment</td> <td></td> <td></td> <td></td> </tr> </table>							Patients	Visitors	N/A	Physical violence				Verbal abuse				Threats				Sexual harassment													
	Patients	Visitors	N/A																																
Physical violence																																			
Verbal abuse																																			
Threats																																			
Sexual harassment																																			
<p>9. What types of physical assaults were you exposed to in most of the incident? (Tick as many as relevant).</p>				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;"><input type="checkbox"/> Punched</td> <td style="width: 33%;"><input type="checkbox"/> Pushed</td> <td style="width: 33%;"><input type="checkbox"/> Slapped</td> </tr> <tr> <td><input type="checkbox"/> Kicked</td> <td><input type="checkbox"/> Bitten</td> <td><input type="checkbox"/> Pinched/grabbed</td> </tr> <tr> <td><input type="checkbox"/> Scratched</td> <td><input type="checkbox"/> Beaten</td> <td><input type="checkbox"/> Spat on</td> </tr> <tr> <td><input type="checkbox"/> Hair pulled</td> <td><input type="checkbox"/> Object thrown/hit by object</td> <td><input type="checkbox"/> Other, please specify:.....</td> </tr> <tr> <td colspan="3"><input type="checkbox"/> N/A</td> </tr> </table>		<input type="checkbox"/> Punched	<input type="checkbox"/> Pushed	<input type="checkbox"/> Slapped	<input type="checkbox"/> Kicked	<input type="checkbox"/> Bitten	<input type="checkbox"/> Pinched/grabbed	<input type="checkbox"/> Scratched	<input type="checkbox"/> Beaten	<input type="checkbox"/> Spat on	<input type="checkbox"/> Hair pulled	<input type="checkbox"/> Object thrown/hit by object	<input type="checkbox"/> Other, please specify:.....	<input type="checkbox"/> N/A																	
<input type="checkbox"/> Punched	<input type="checkbox"/> Pushed	<input type="checkbox"/> Slapped																																	
<input type="checkbox"/> Kicked	<input type="checkbox"/> Bitten	<input type="checkbox"/> Pinched/grabbed																																	
<input type="checkbox"/> Scratched	<input type="checkbox"/> Beaten	<input type="checkbox"/> Spat on																																	
<input type="checkbox"/> Hair pulled	<input type="checkbox"/> Object thrown/hit by object	<input type="checkbox"/> Other, please specify:.....																																	
<input type="checkbox"/> N/A																																			

10. When did most of the violence incident happen? (Tick only one)	<input type="checkbox"/> Morning	<input type="checkbox"/> Afternoon	
	<input type="checkbox"/> Night	<input type="checkbox"/> Unsure	
11. Where did most of the violence incident happen? (Tick only one)	<input type="checkbox"/> Hallway	<input type="checkbox"/> Waiting area	<input type="checkbox"/> Treatment room
	<input type="checkbox"/> Counter	<input type="checkbox"/> X-ray room	<input type="checkbox"/> Other, please specify:.....
12. Did you receive treatment after the incidents? (Tick only one)	<input type="checkbox"/> Yes I received treatment <input type="checkbox"/> No. There was no need for treatment <input type="checkbox"/> I needed treatment but did not receive it <input type="checkbox"/> Self-treatment		
13. In most of the incidents you exposed to, what was the reason? (Tick as many as relevant)	<input type="checkbox"/> Waiting for receiving service <input type="checkbox"/> Failure to meet the desire of the patient or his companions <input type="checkbox"/> Mental health/ Psychiatric patient <input type="checkbox"/> Way of dealing with patient by the staff <input type="checkbox"/> Unavailability of medications or needed service for patient <input type="checkbox"/> Fear/ Stress <input type="checkbox"/> Lack of tools to prevent the attack on worker <input type="checkbox"/> Impact of disease/ pain <input type="checkbox"/> Influence of alcohol/drugs <input type="checkbox"/> Do not know the reason <input type="checkbox"/> Another reason, please specify:.....		



Universiti Utara Malaysia

Section 3: System and means of protection available and the procedure for violence.

14. Are there enough methods to prevent violence on staff (such as guards, security, camera, warning devices, contact) in the department?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know		
15. Are there enough policies, systems and instructions to prevent violence on workers in the hospital?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know		
16. Are there reporting procedures for the reporting violence in the hospital?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know		
17. Did you receive training or educational programs by the hospital to prevent and deal with violence?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know		
18. In most of the violence incident you exposed to, did you write a report to your administration or to any third party administrator for the violence against you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A		
19. Has any action been taken against the assaulter?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Do not know	<input type="checkbox"/> N/A	
20. In your opinion, why does violence incidents at workplace were not reported? (Tick as many as relevant)	<input type="checkbox"/> The incident was not important. <input type="checkbox"/> Fear of consequences on oneself or their work <input type="checkbox"/> Feeling ashamed of the incident. <input type="checkbox"/> Do not know whom should to report to <input type="checkbox"/> No benefit in writing, there will be no follow up or action against the assaulter <input type="checkbox"/> Other, please specify:.....				
21. In the next 1-3 years, do you think you will stop working in the Emergency Department because of exposure to violence?	<input type="checkbox"/> very likely	<input type="checkbox"/> Likely	<input type="checkbox"/> Not decided yet	<input type="checkbox"/> Unlikely	<input type="checkbox"/> Very Unlikely

Section 4: Safety scale and questions:

Please circle your answer.

1 2 3 4 5 6 7 8 9 10

Strongly Disagree

Strongly Agree

22. I feel safe (free from violence) when working in the Emergency Department.
- 1 2 3 4 5 6 7 8 9 10
23. I think there is a good chance of being injured from an assault by a PATIENT while working in the ED during the NEXT 6 MONTHS.
- 1 2 3 4 5 6 7 8 9 10
24. I think there is a good chance of being injured from an assault by a VISITOR while working in the ED during the NEXT 6 MONTHS.
- 1 2 3 4 5 6 7 8 9 10

Section 5: Confident scale and questions:

1 2 3 4 5 6 7 8 9 10

Not confident at all

Extremely Confident

25. Your ability to manage patients/visitors who become PHYSICALLY VIOLENT towards you or your coworkers?
- 1 2 3 4 5 6 7 8 9 10
26. Your ability to manage patients/visitors who become VERBALLY ABUSIVE to you or your coworkers?
- 1 2 3 4 5 6 7 8 9 10
27. Your ability to manage patients/visitors who THREATENING you or your coworkers?
- 1 2 3 4 5 6 7 8 9 10
28. Your ability to manage patients/visitors who become SEXUALLY HARASSING towards you or your coworkers?
- 1 2 3 4 5 6 7 8 9 10

End of questionnaires

BORANG KAJI SELIDIK

Tajuk kajian: Keganasan di Tempat Kerja Terhadap Kakitangan Jabatan Kecemasan Pusat Perubatan Universiti Malaya

Sila tanda (✓) dalam kotak yang disediakan untuk jawapan yang bersesuaian. Sila buat hanya satu pilihan kecuali diarahkan sebaliknya.

Bahagian 1 : Maklumat demografik dan pekerjaan

Adakah anda telah bekerja di Jabatan Kecemasan selama setahun dan ke atas?

- ☐ Ya (Sila teruskan dengan soal selidik)
☐ Tidak (Sila jangan teruskan dengan soal selidik- Terima kasih untuk masa anda)

1. Jantina	<input type="checkbox"/> Lelaki	<input type="checkbox"/> Perempuan	
2. Bangsa	<input type="checkbox"/> Melayu	<input type="checkbox"/> Cina	
	<input type="checkbox"/> Indian	<input type="checkbox"/> Lain-lain: (sila nyatakan).....: ...	
3. Umur	Sila nyatakan:.....tahun		
4. Pengalaman bekerja	Sila nyatakan:.....tahun		
5. Pendidikan	<input type="checkbox"/> SPM	<input type="checkbox"/> Diploma	
	<input type="checkbox"/> Ijazah	<input type="checkbox"/> Sarjana	
	<input type="checkbox"/> Lain-lain: (sila nyatakan):.....		
6. Occupation	<input type="checkbox"/> Pegawai perubatan	<input type="checkbox"/> Jururawat	<input type="checkbox"/> Pembantu Pegawai Perubatan
	<input type="checkbox"/> Pembantu Perawat Kesihatan	<input type="checkbox"/> Juru X-ray	<input type="checkbox"/> Kerani
	<input type="checkbox"/> Pegawai Farmasi/Pembantu Peg.Farmasi	<input type="checkbox"/> Pengawal Keselamatan	

Sila baca definisi yang diberikan sebelum anda beralih ke bahagian yang seterusnya

Definisi:

Keganasan di tempat kerja adalah insiden di mana kakitangan didera, diancam atau diserang dalam situasi yang berkaitan dengan kerja mereka, termasuk ketika pergi dan pulang dari tempat kerja, yang melibatkan sesuatu yang menggugat keselamatan, kesejahteraan atau kesihatan mereka secara terang-terangan atau secara tidak langsung.

Keganasan fizikal melibatkan sentuhan fizikal terhadap individu manakala keganasan bukan fizikal tidak melibatkan sentuhan fizikal terhadap individu.

Keganasan fizikal adalah penggunaan kekerasan terhadap kakitangan oleh pesakit dan/atau ahli keluarga/kenalan rapat mereka, rakan bekerja atau sesiapa sahaja, yang melibatkan sentuhan fizikal tanpa mengira sama ada terdapat kecederaan atau tidak; contohnya **menendang, memukul, menolak, mencubit, mencakar, menusuk, melempar objek, atau meludah.**

Penderaan lisan berlaku apabila seseorang (pesakit, saudara-mara pesakit, pengunjung atau rakan sejawat) **menjerit, mengutuk, melemparkan sindiran, atau sebarang pernyataan** dengan tujuan menghina kakitangan terbabit tanpa niat untuk mencederakan kakitangan.

Ancaman berlaku apabila seseorang (pesakit, saudara-mara pesakit, pelawat atau rakan sejawat) **menggunakan perkataan, isyarat, tingkah laku untuk menakutkan atau mengugut untuk melakukan kekerasan** (secara fizikal atau lain-lain) terhadap kakitangan terbabit.

Gangguan seksual adalah sebarang gangguan bersifat seksual yang tidak diingini, termasuk **secara lisan atau fizikal**, yang dilakukan demi kepuasan pelaku, dan **menyinggung perasaan individu.**

Bahagian 2: Insiden Keganasan

Sila jawab soalan berikut, mengenai insiden keganasan yang telah anda hadapi sejak 12 bulan lalu dengan menanda (✓) pada jawapan bersesuaian..

7. Dalam tempoh 12 bulan yang lalu berapa kali anda telah terdedah kepada insiden keganasan di Jabatan Kecemasan?

(Jika semua jawapan anda 'tidak pernah', sila teruskan ke bahagian 3)

	Tidak pernah	Sekali	2-3 kali	4-5 kali	≥ 6 kali
Keganasan fizikal					
Penderaan lisan					
Ancaman					
Gangguan seksual					

8. Siapakah yang menjadi pelaku bagi kebanyakan insiden yang telah anda hadapi??
(Tandakan jawapan berkaitan).

	Paesakit	Pelawat	Tidak berkaitan (T/B)
Keganasan fizikal			
Penderaan lisan			
Ancaman			
Gangguan seksual			

9. Apakah jenis serangan fizikal yang anda hadapi dalam kebanyakan kejadian (tandakan jawapan yang berkaitan).

<input type="checkbox"/> Ditumbuk	<input type="checkbox"/> Ditolak	<input type="checkbox"/> Ditampar
<input type="checkbox"/> Ditendang	<input type="checkbox"/> Digigit	<input type="checkbox"/> Dicubit/Ditarik
<input type="checkbox"/> Dicakar	<input type="checkbox"/> Dipukul	<input type="checkbox"/> Diludahi
<input type="checkbox"/> Ditarik rambut	<input type="checkbox"/> Dibaling/ Dipukul menggunakan objek	<input type="checkbox"/> Lain-lain: (sila nyatakan)
<input type="checkbox"/> T/B		

10. Bilakah waktu kebanyakan insiden tersebut berlaku? (Tandakan satu jawapan)	<input type="checkbox"/> Pagi	<input type="checkbox"/> Petang	
	<input type="checkbox"/> Malam	<input type="checkbox"/> Tidak pasti	
11. Di manakah kebanyakan insiden tersebut berlaku(Tandakan satu jawapan)	<input type="checkbox"/> Koridor	<input type="checkbox"/> Ruang menunggu	<input type="checkbox"/> Bilik rawatan
	<input type="checkbox"/> Kaunter	<input type="checkbox"/> Bilik X-ray	<input type="checkbox"/> Lain-lain: (sila nyatakan):.....
12. Adakah anda menerima rawatan setelah insiden tersebut berlaku? (Tandakan satu jawapan)	<input type="checkbox"/> Ya saya menerima rawatan <input type="checkbox"/> Tidak , rawatan tidak diperlukan <input type="checkbox"/> Saya memerlukan rawatan, namun tidak mendapatkannya <input type="checkbox"/> Membuat rawatan sendiri		
13. Apakah menjadi punca kepada kebanyakan insiden keganasan yang anda hadapi? (tandakan jawapan yang berkaitan)	<input type="checkbox"/> Masa menunggu yang panjang <input type="checkbox"/> Kegagalan memenuhi kehendak pesakit/pelawat <input type="checkbox"/> Masalah mental/ pesakit psikiatri <input type="checkbox"/> Cara kakitangan mengendalikan pesakit <input type="checkbox"/> Ketiadaan ubat/ perkhidmatan yang diperlukan pesakit <input type="checkbox"/> Takut/Tekanan <input type="checkbox"/> Kekurangan peralatan untuk menghalang serangan terhadap kakitangan <input type="checkbox"/> Impak daripada kesakitan/penyakit <input type="checkbox"/> Dipengaruhi alkohol/dadah <input type="checkbox"/> Tidak tahu punca <input type="checkbox"/> Lain-lain sebab, (sila nyatakan):.....		



Universiti Utara Malaysia

Bahagian 3 : Sistem serta perlindungan yang disediakan, dan prosedur menghadapi keganasan

14. Adakah terdapat kaedah perlindungan yang mencukupi untuk mengelakkan keganasan terhadap kakitangan di Jabatan Kecemasan?(seperti sekuriti, kamera, atau alat amaran)	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> Tidak tahu		
15. Adakah terdapat polisi, sistem, dan arahan yang cukup untuk mengelakkan keganasan terhadap pekerja di hospital?	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> Tidak tahu		
16. Adakah terdapat prosedur laporan untuk membuat laporan keganasan di hospital?	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> Tidak tahu		
17. Adakah anda menerima sebarang latihan atau program pendidikan di hospital tentang tatacara mengendalikan keganasan?	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> Tidak tahu		
18. Dalam kebanyakan insiden, adakah anda ada menulis laporan kepada pentadbiran atau mana-mana pihak ketiga tentang insiden keganasan yang anda telah hadapi?	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> T/B		
19. Adakah sebarang tindakan dikenakan kepada pelaku insiden tersebut?	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak	<input type="checkbox"/> Tidak tahu	<input type="checkbox"/> T/B	
20. Pada pendapat anda, mengapakah insiden keganasan tidak dilaporkan?(Tandakan mana-mana jawapan yang berkenaan)	<input type="checkbox"/> Insiden tersebut tidak penting <input type="checkbox"/> Takut akan kesannya terhadap diri dan kerja <input type="checkbox"/> Berasa malu dengan insiden tersebut <input type="checkbox"/> Tidak tahu kepada siapa insiden tersebut harus dilaporkan <input type="checkbox"/> Tiada faedah dalam memberi laporan kerana tiada tindakan akan dikenakan kepada pelaku insiden tersebut <input type="checkbox"/> Lain-lain sebab (sila nyatakan):.....				
21. Dalam tempoh 1-3 tahun akan datang, adakah anda akan berhenti bekerja di Jabatan Kecemasan kerana terdedah kepada keganasan?	<input type="checkbox"/> Berkemungkinan besar	<input type="checkbox"/> Mungkin	<input type="checkbox"/> Belum membuat keputusan	<input type="checkbox"/> Tidak mungkin	<input type="checkbox"/> Sangat tidak mungkin

Bahagian 4: Skala keselamatan dan soalan berkaitan

Sila bulatkan jawapan anda mengikut skala berikut:

1	2	3	4	5	6	7	8	9	10
Sangat tidak setuju									Sangat bersetuju

22. Saya berasa selamat (bebas daripada keganasan) semasa bekerja di Jabatan Kecemasan
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
23. Saya berkemungkinan besar akan tercedera akibat serangan daripada PESAKIT semasa bekerja di Jabatan Kecemasan dalam tempoh 6 BULAN AKAN DATANG
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
24. Saya berkemungkinan besar akan tercedera akibat serangan daripada PELAWAT semasa bekerja di Jabatan Kecemasan dalam tempoh 6 BULAN AKAN DATANG
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

Bahagian 5: Skala tahap keyakinan dan soalan berkaitan

1	2	3	4	5	6	7	8	9	10
Langsung tidak yakin									Sangat yakin

25. Kebolehan anda mengendalikan pesakit/pelawat yang melakukan KEKERASAN FIZIKAL terhadap anda atau rakan sejawat yang lain?
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
26. Kebolehan anda mengendalikan pesakit/pelawat yang melakukan PENDERAAN LISAN terhadap anda atau rakan sejawat yang lain?
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
27. Kebolehan anda mengendalikan pesakit/pelawat yang memberi ANCAMAN terhadap anda atau rakan sejawat yang lain?
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
28. Kebolehan anda mengendalikan pesakit/pelawat yang melakukan GANGGUAN SEKSUAL terhadap anda atau rakan sejawat yang lain?
- | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

Soalan tamat

APPENDIX D



**UNIVERSITY
OF MALAYA
MEDICAL CENTRE**

MEDICAL RESEARCH ETHICS COMMITTEE
(Formerly known as Medical Ethics Committee)
UNIVERSITY OF MALAYA MEDICAL CENTRE
ADDRESS : LEMBAH PANTAI, 59100 KUALA
LUMPUR, MALAYSIA
TELEPHONE : 03-79493209/2251 FAXIMILE : 03-
79492030

NAME OF ETHICS COMMITTEE/IRB Medical Research Ethics Committee, University Malaya Medical Centre	MREC ID NO: 2018511-6287
ADDRESS : LEMBAH PANTAI, 59100 KUALA LUMPUR, MALAYSIA	
PROTOCOL NO (if applicable) :	
TITLE: VIOLENCE AGAINST EMERGENCY DEPARTMENT WORKERS IN UNIVERSITY MALAYA MEDICAL CENTRE	
PRINCIPAL INVESTIGATOR : Ms SAIDAH BINTI SATDERI	SPONSOR -

The following item ☒ have been received and reviewed in connection with the above study to conducted by the above investigator.

<input checked="" type="checkbox"/> Application to Conduct Research Project(form)	Ver.No :	Ver.Date : 11-05-2018
<input checked="" type="checkbox"/> Study Protocol	Ver.No : 1	Ver.Date : 14-04-2018
<input checked="" type="checkbox"/> Patient Information Sheet	Ver.No : 1	Ver.Date : 21-05-2018
<input checked="" type="checkbox"/> Consent Form	Ver.No : 1	Ver.Date : 21-05-2018
<input type="checkbox"/> Questionnaire	Ver.No :	Ver.Date :
<input checked="" type="checkbox"/> Investigator's CV / GCP (Ms SAIDAH BINTI SATDERI, Dr. Mohd Faizal Bin Mohd Isa,)	Ver.No :	Ver.Date :
<input type="checkbox"/> Insurance certificate	Ver.No :	Ver.Date :
<input checked="" type="checkbox"/> Other documents		
1) questionnaire	Ver.No : 001	Ver.Date : 14-04-2018
2) gant chart	Ver.No : 001	Ver.Date : 14-04-2018

and the decision is ☒

☐ Approved (Full Board)

☒] Approved (Expedited)

☐] Rejected (reasons specified below or in accompanying letter)

Comments:

Questionnaire study

The Investigators are required to:

- 1) *follow instructions, guidelines and requirements of the Medical Research Ethics Committee.*
- 2) *report any protocol deviations/violations to Medical Research Ethics Committee.*
- 3) *provide annual and closure report to the Medical Research Ethics Committee.*
- 4) *comply with International Conference on Harmonization – Guidelines for Good Clinical Practice (ICH-GCP) and Declaration of Helsinki.*
- 5) *obtain a permission from the Director of UMMC to start research that involves recruitment of UMMC patient.*
ensure that if the research is sponsored, the usage of consumable items and
- 6) *laboratory tests from UMMC services are not charged in the patient's hospital bills but are borne by research grant.*
- 7) *note that he/she can appeal to the Chairman of Medical Research Ethics Committee for studies that are rejected.*
- 8) *note that Medical Research Ethics Committee may audit the approved study.*
- 9) *ensure that the study does not take precedence over the safety of subjects.*

Date of expedited approval : 12-07-2018

Approval By : LOOI LAI MENG (Chairman, MREC)

This is a computer generated letter. No signature required.